

P. H. R.



HEALTH NOTES

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Palatka, Fla.

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Pensacola, Fla.

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This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

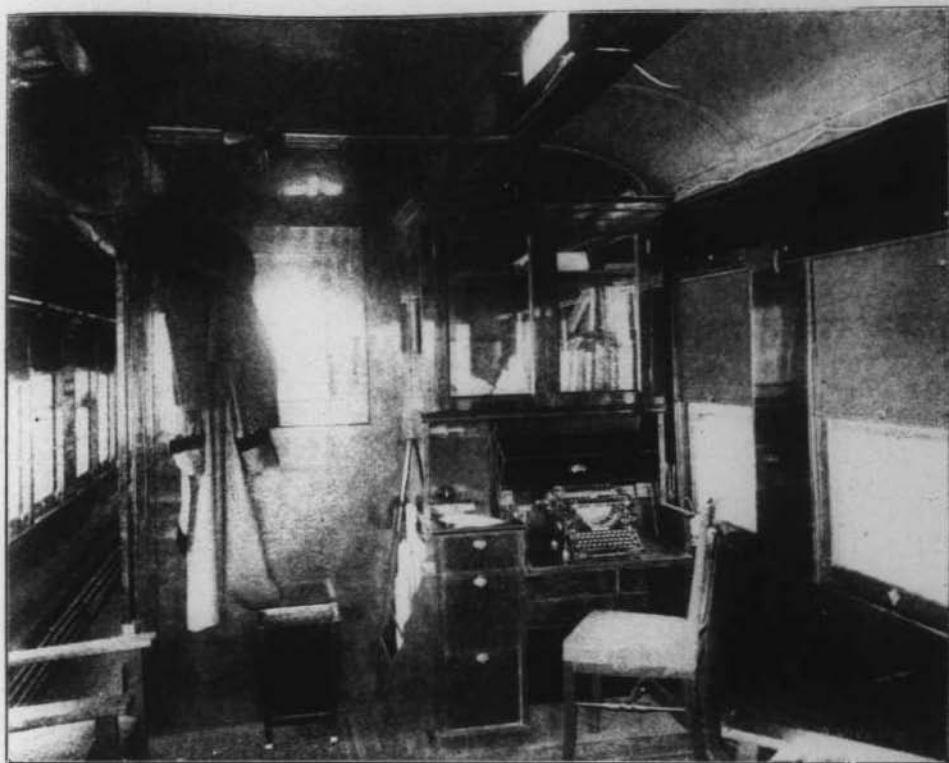
Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

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LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Publication 89, Hog Cholera, January, 1912, pp. 12.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
- Publication 102, Typhoid Fever in Tampa, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 24.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 121, Vital Statistics, All Florida Municipalities can have Vital Statistics, Leaflet, Reprint from Florida Health Notes, August, 1914.
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 137, Report of Surgeon in Charge of Work under the "Crippled Children" Act, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 8, illustrated.
- Publication 138, Annual Report of Veterinary Department of the State Board of Health of Florida, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 57.
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.



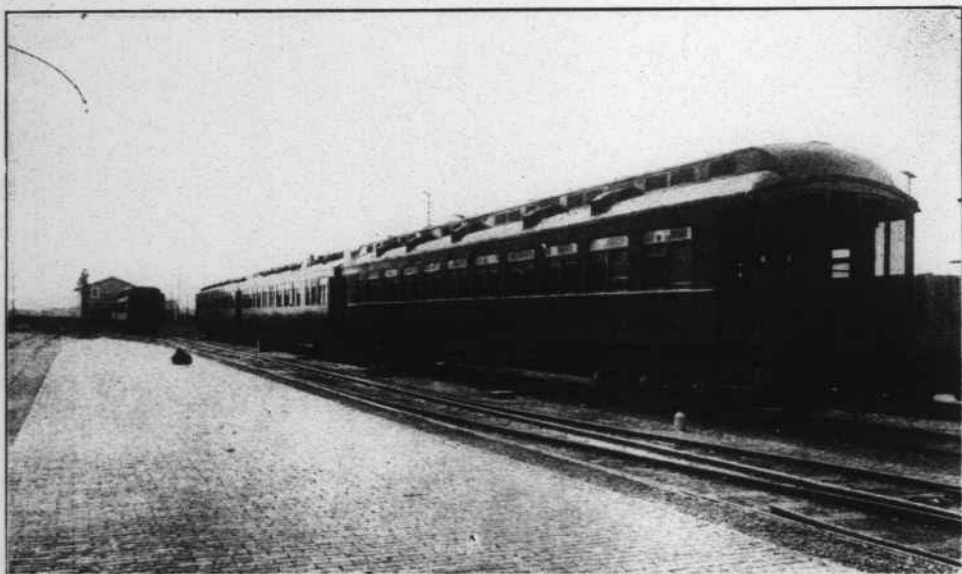
OFFICE, EDUCATIONAL HEALTH EXHIBIT TRAIN, CAR NO. 1

FLORIDA'S "HEALTH TRAIN"

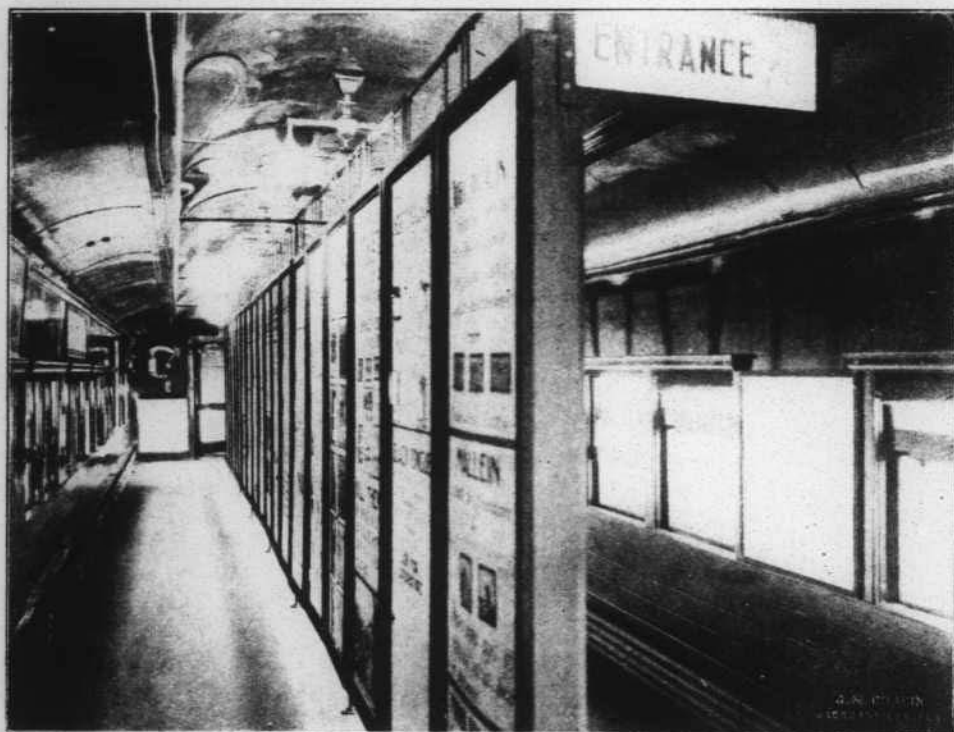
Just one year ago there appeared in the "Notes" an announcement that the State Board of Health had prepared an exhibit, which was to be sent throughout the State as an additional and probably the most important, feature of the already extensive educational campaign which has been waged by the Board since its creation in 1889, more than a quarter of a century ago.

This exhibit was the outgrowth of the plan which has been followed by the State Board of Health in its attempt to instruct the individual citizens of Florida in those fundamental laws of right-living and precaution upon which are founded the principles of disease prevention, and which are essential to the attainment and preservation of health. For in such matters it is upon the individual that the real responsibility must rest; and without his intelligent cooperation no material progress can be made, no matter how active the health department, nor how full its authority, nor how wise and far-reaching the laws of the State may be.

In teaching these simple but important lessons a need was felt for some method of ocular demonstration in order that the people of Florida might be shown graphically and plainly those truths which had for years been brought to them through pamphlets, lectures and the



EXTERIOR VIEW, EDUCATIONAL HEALTH EXHIBIT TRAIN



INTERIOR VIEW, CAR NO. 3

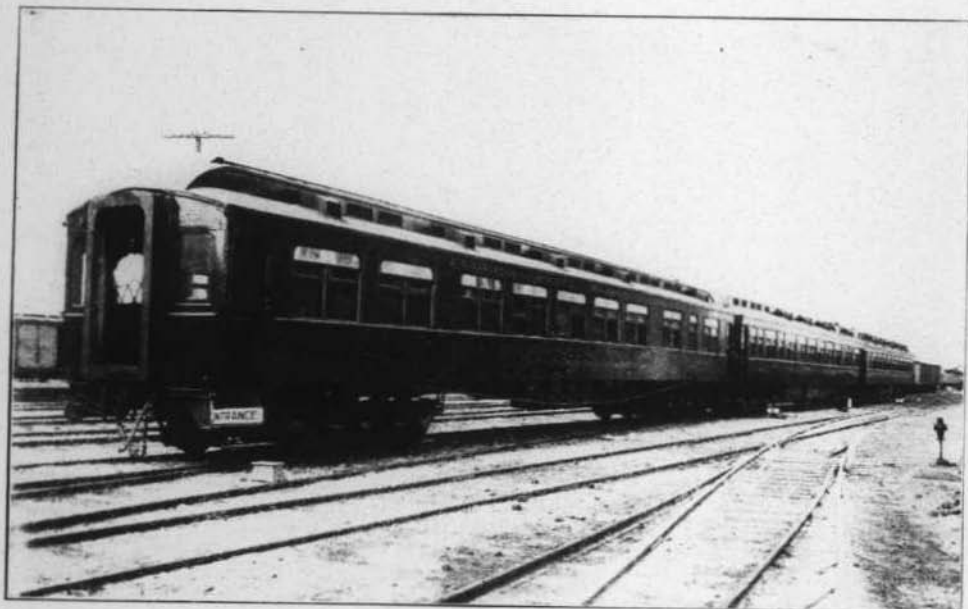


INTERIOR VIEW, CAR NO. 2

press. The "Health Exhibit" was the result; and the enthusiasm with which it was received proved that the right note had been struck. The success which attended its display encouraged the State Health Officer to extend the efforts in this direction, much new material being added from time to time, so that the exhibit finally grew to such proportions that it was impossible in many small communities to secure a hall of sufficient size to accommodate it.

The idea of a completely equipped "Educational Health Exhibit Train" was then conceived, and the State Railroad Commission was requested to grant permission to the railroads for the free transportation of such a train. The Commission, however, expressed the opinion that it had no authority to grant such permission without special legislative enactment. A bill was accordingly drafted, which was promptly passed by the legislature, authorizing the purchase of cars for this use, and permitting the free transportation of them by any railroad companies. Prior to this time the matter had been broached to the various railroad companies operating in the State, and they had without exception promptly responded with enthusiastic assurance of their assistance and cooperation in the work.

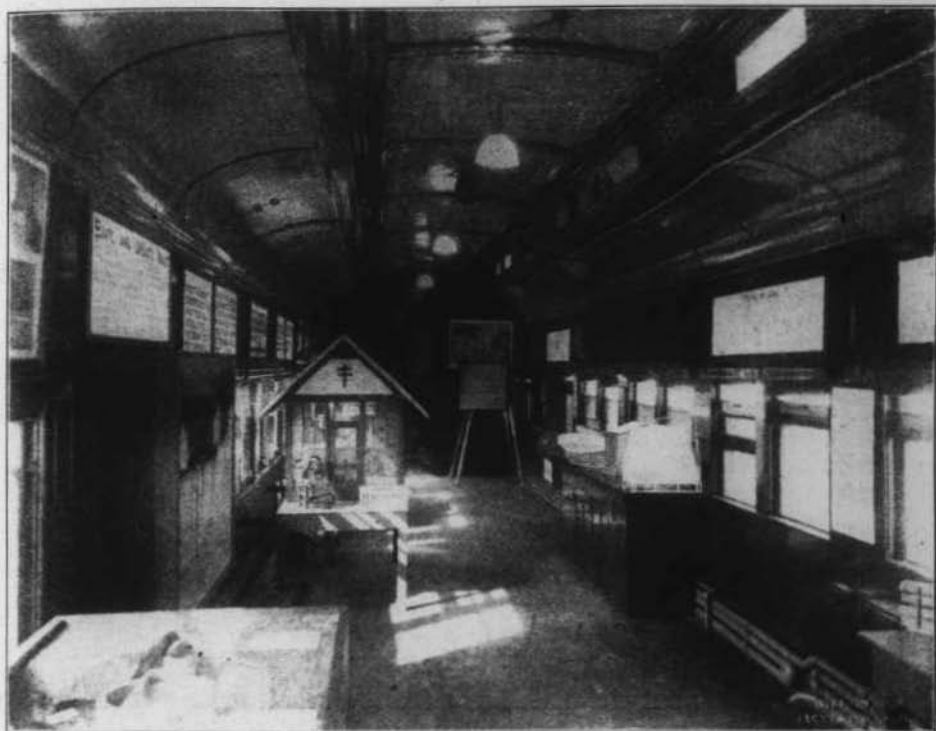
Arrangements were then begun with the Pullman Company for the purchase and remodeling of three standard sleeping cars, which were secured at a most reasonable figure. These cars were completely remodeled and prepared for the new service in which they were to be used, and finally arrived in Jacksonville during last November.



EXTERIOR VIEW, EDUCATIONAL HEALTH EXHIBIT TRAIN



INTERIOR VIEW, CAR NO. 3



INTERIOR VIEW, CAR NO. 2

Then was begun the work of installing in the cars the models, charts, panels and various electrical devices which teach so clearly and forcefully the many plain truths in which Florida's Health Board has for years attempted to instruct all who would hear and heed.

The entire expense of this undertaking, including the initial cost of the cars, their equipment, maintenance and operation, is to be paid from the State Board of Health fund without the assistance of any special appropriation, so that this great educational work will be accomplished without the addition of a single dollar to the burdens borne by the taxpayers of the State.

The train consists of three cars. "Number 1" is equipped as a living car for those engaged in the demonstration of the exhibit; and contains four staterooms, bath and toilets, kitchen, dining room and office. It contains no exhibits; but being a model of cleanliness and sanitary methods of housekeeping, it may well serve as a valuable object lesson to housewives throughout the State.

A part of car number 2 is occupied by the servants' quarters, bath and toilet, and the engine and dynamo by means of which the entire train is supplied with electricity. This portion of the car also contains a room in which is installed the latest type of moving picture machine. In this manner it is possible to display in every community, no matter how small, a number of films. Many important subjects are thus presented by this popular method of demonstration. The machine is

operated within the car, the pictures being projected upon a screen erected at a convenient point outside. The major portion of the second car is devoted to various models, illusions, charts and other interesting and instructive devices, including a stereomotorgraph, which is an automatic, electrically-operated stereopticon with a capacity of fifty-two slides.

Car number 3 also contains a stereomotorgraph and a number of models, the "Fly Table" and the "Fly's Air Line" being particularly striking features of this portion of the exhibit. This car is divided through most of its length by a partition upon which are mounted thirty-six panels, bearing photographs, drawings and terse, forcefully-worded sentences of advice, instruction and warning.

This train furnishes an educational medium which should prove of inestimable value to all who will see and observe the plain facts which it so clearly sets before them. It is believed that it will prove a more potent factor in the improvement of the health of Florida than any other single line of endeavor in which the State Board of Health is engaged.

The entire state will be covered, stops being made at practically every railroad station, thus bringing to every section of Florida, no matter how remote, the gospel of good health and disease prevention.

C. H. D.

WEIGHT AND WEIGHING THE BABY

(Prepared by the Children's Bureau, U. S. Department of Labor)

The baby's weight is perhaps the best index the mother has of his condition. The average weights of babies of given ages are now pretty well established, and a weight noticeably lower than the average indicates a lack of development due either to deficient diet, or to illness, while an excess of fat may point to improper feeding. If the baby's weight either remains stationary for any considerable time, or begins to fall off it is always a sign that something is wrong; and the mother should seek the help of a good doctor, without delay.

The average girl weighs 7 pounds at birth, while boys average half a pound heavier.

During the first four days the baby may lose from one or two ounces to a pound, while waiting for the mother's milk to be established, but as soon as he begins to nurse regularly he should quickly regain this loss. During the first month he should gain about three-quarters of an ounce each day; then up to the sixth month, from four to eight ounces a week, and from the sixth to the twelfth month two to four ounces a week.

At three months the average baby weighs from twelve to fourteen pounds; at six months, fifteen to sixteen pounds; at nine months, seventeen to eighteen pounds; and at one year, twenty to twenty-two pounds. The baby thus usually doubles his weight at five or six months, and at the end of his first year weighs three times as much as at birth. Most babies do not gain quite steadily, week by week. During short periods, owing to excessive heat, when the food is reduced, a baby may show no gain, and may even fall off a little. This condition

should be temporary and he ought to begin to gain as soon as the disturbance subsides.

Bottle-fed infants do not gain as rapidly during the first months as do breast-fed babies, but after the ninth month they are apt to gain more steadily because they do not lose weight as breast-fed babies usually do at the time of weaning.

A very fat baby is not to be desired. Although mothers are prone to believe that a fat baby is a healthy one, this is not necessarily true. An exclusive diet of certain of the proprietary infant foods, consisting largely of sugar or of starch, is very apt to produce excessive fat, and give a false impression of abounding health, since bones and muscles may thus be deprived of their proper nourishment. Over-fat babies are very uncomfortable in the summer from prickly heat and other ills.

A healthy baby has a well-rounded body, without wads and cushions of fat, or pendulous cheeks and pudgy legs. He has springy muscles, and is alert, active and full of life and motion.

In order that the mother may be informed as to the baby's progress, he should be weighed at regular intervals throughout at least the first year. For the first week or longer, he should be weighed every day; during the first six months, once a week; and later once in two weeks.

Breast-fed babies may be weighed just before and just after a nursing to determine how much milk they are getting, and to find out whether or not they need supplementary feeding. They should be weighed in exactly the same clothing both times, and to determine the daily gain, at the same hour each day.

The best scales are ordinary platform balance scales such as are used in grocery stores. A special basket or pan which fits on the platform, and which will hold the baby comfortably is desirable. Spring scales are less accurate but are cheaper, and are better than no scales at all. Most country households have enough general use for a good scale, so that such a purchase will not be an extravagance. Many city mothers have the advantage of being able to go to an infant welfare station where the baby may be weighed as often as desirable. In these cases it is easy to keep a careful record of the baby's growth.

The Children's Bureau has published a bulletin called *Infant Care*, which contains directions for weighing the baby and also a chart for recording the weight. This publication is sent free to all who ask for it, addressing the Chief of the Children's Bureau, U. S. Department of Labor, Washington, D. C.

A CORRECTION

Through error, the article entitled "The Tyranny of Fat" was published in the December issue of *Health Notes* without giving credit to the author, Dr. Chas. E. Banks, Surgeon, U. S. Public Health Service.

Health Briefs

Sanitation is of greater importance than a standing army.

Hundreds of thousands of lives are needlessly lost in the United States yearly, due to apathy and negligence in matters of hygiene and sanitation.

Preventable diseases have caused greater loss of life than all the wars.

It is too late to insure a building against fire after it has burned down. It is likewise too late to be vaccinated against smallpox after the disease is contracted.

It is the duty of all parents to protect their children against preventable disease, with special reference to hookworm, typhoid fever, malaria, diphtheria, smallpox and tuberculosis.

The care of the baby is a responsibility that should be given very careful study and not passed over lightly. It is more important to keep the baby healthy than to raise a good hog.

The fly season will soon be here, and all windows and doors should be screened, and all screens carefully repaired. Prevention is better than cure.

Patent medicine advertisements are never published in the leading magazines. This is due to the fact that they do not consider it good business to sell their space to unscrupulous persons who would fool the public with worthless "cure-alls."

Providence should never be blamed for so-called "untimely deaths." A little retrospection will nearly always bring out the fact that these deaths are due to *preventable* causes.

The citizens of every community are entitled to due protection by their municipality from preventable disease. The time is not far distant when the municipal government that does not give this protection will be branded as not only incompetent, but negligent.

A study of the statistical reports from the four largest cities of Florida, all of which are included in the registration area of the United States Bureau of the Census, shows that the crude combined death rate for the year 1915 was 16.3 per one thousand population as against 17.5 in 1914. These figures include both resident and non-resident deaths, the white rate being 13.3 and the colored 21, as compared with 14.5 and 22.1 for the preceding year.

Correspondence

BOILING DRINKING WATER FOR PURITY

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: I am writing you for information as per invitation in "Health Notes."

I have been in the habit of boiling drinking water, even when ice water was used. Recently have been using artesian water from hydrant where pipes are laid in ground some distance from well. Have been boiling it, but was told by a gentleman that artesian water was pure and should not be boiled, that boiling killed it. I suppose he meant that it spoiled the beneficial effect of the water. Kindly give me your opinion, and state whether the use of artesian water is detrimental to the bladder as some claim. Is there more lime in it than is required for the system?

Yours very truly,

Jacksonville, Fla., Jan. 13, 1916.

Dear Madam: Replying to your letter of the 11th inst., I will say that in my opinion there are very few, if any waters which have no appreciable medicinal matter. The effect is usually derived from the amount of water consumed rather than from the chemical composition of the water itself.

Artesian water, in different sections of the State and from different wells in the same locality, varies greatly in its chemical composition, although as a general rule it is rather "hard," containing a great amount of lime and sulphur. This fact, however, should not render it detrimental to the health of those consuming it. The purity of such water depends entirely upon the depth and location of the well from which it is secured and the presence or absence of sources of contamination adjacent, although as a general rule artesian water is less apt to be polluted than water from more shallow wells.

Boiling water is unnecessary, unless it is contaminated, but I do not agree with the gentleman that informed you that boiling the water in any way affected the value of the water for drinking purposes, nor as stated above, can you accept the statement that all artesian water is pure.

If you have any occasion to believe that the water from your well is impure, I should be glad to send you containers, in which samples may be collected and expressed to our Laboratory for examination.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

ADVICE TO SUSPECTED CASE OF TUBERCULOSIS

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: I wish to write you a few words in regard to my condition. I have had a hurting in my breast for the last three or four years. It doesn't pain me all the time, sometimes it doesn't hurt me for a week or

more, and it stops hurting when I lie down. I haven't any cough of any kind, but something like phlegm comes up in my mouth very often. I sleep well at night, eat fairly heartily, but I am losing some in weight. I do all my house work, and feel well as common, only when my breast pains me. I want you to think over my case and see if you can give me any information in some way that I may be cured. I don't think I have got tuberculosis, yet, but I fear it may run into it. Any advice will be appreciated. There is a medicine called "Lung Germine." Do you think it would benefit me any? My age is 30 years, weight 110 pounds. Please send me your bulletin "Health Notes." Awaiting an early reply, I remain,

Yours very truly,

Jacksonville, Fla., January 15, 1916.

Dear Madam: I am in receipt of your letter of January 14th and in reply I regret to say that it would be impossible without a very careful personal examination for me to advise you with any degree of accuracy concerning the nature of your trouble. I am mailing you today a small bottle and container for same, in which you may collect a specimen of your sputum and mail it to the State Board of Health laboratory, at Jacksonville, for examination. In the early stages of consumption, however, a laboratory examination is not always conclusive, and would accordingly advise that you consult one of your local physicians and have him make a thorough physical examination.

You need have no fear of any other disease "running in to" consumption. Consumption is a different and distinct disease and is dependent upon a certain known cause, which is the tubercle bacillus. Unless you have in your body these germs you cannot have tuberculosis. It is possible, however, that other diseases may render you more susceptible to this disease, merely by reducing your strength and your power of resistance.

I could most strongly advise you against the use of patent medicines. These are practically always useless and very often harmful, for the reason of the fact that they usually contain a large percentage of alcohol, which is always detrimental to such cases.

I am placing your name upon the mailing list for "Health Notes," in which I trust you will find much useful information. Assuring you of my willingness to give you any advice possible or to assist you in any way within my power, I am,

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

The NOTES takes pleasure in reproducing herewith a letter by Mr. W. G. Bell, Sanitary Inspector of Gainesville, to the *Gainesville Sun* which appeared in a recent issue of that newspaper. In this letter an excellent plan of public health administration for the municipality is outlined, having, as its basis, the germ factor in disease, the evolution of which is very interestingly and concisely related:

THE CONTROL OF COMMUNICABLE DISEASES

Nearly forty years have passed since Pasteur startled the civilized world by his dramatic statement, "It is within the power of man to abolish contagious disease from the earth." It seems quite clear now that few, if any, of his contemporaries grasped the full significance of this prophecy. It is probable that most of them believed that it was merely the idle dream of a visionary. Yet each year only shows more clearly the great fundamental truth of this prophecy. Few now doubt the literal truth of his contention. Whether mankind ever completely realizes the vision and actually DOES abolish all contagious disease depends entirely upon whether mankind is willing to pay the price. The price can be partly expressed in terms of money, but even more in terms of work and investigation, of cheerful acceptance by the individual of restraint and inconvenience for the benefit of the many, and above all, of the widespread universal education in the simple fundamental principles of hygiene.

ACHIEVEMENTS UP TO THE PRESENT.

The most encouraging hope and promise for the future in any consideration of this subject is in the achievements of the immediate past. It is no exaggeration to say that until the past half century mankind never made any intelligent advance against communicable diseases. Their true nature was entirely unknown, and without this fundamental knowledge any real progress was impossible. Since the discovery of the true causes of communicable diseases phenomenal advance has been made, even though the exact nature of the causative germ of some of them baffle our best investigators to this day. Yellow fever, Asiatic cholera, Typhus fever, for instance, have all been eradicated from our shores or kept at a negligible minimum as causes of sickness and death. Yet all of these terrible pestilences have ravaged cities of this country within the recent past and would do so again tomorrow were it not for the continuous vigilance of the guardians of the nation's health. Among our common everyday communicable diseases the results are no less gratifying and astonishing. But is something more than that. It is a wonderful monument to the intelligence, self control and public spirit of the citizens of the commonwealth; to the skill and devotion of the medical and nursing professions; and especially to the zeal, wisdom and devotion to the public good of the officials of both the State and local boards of health of the commonwealth during these past two decades. It is impossible to surpass this record for several of these diseases, for they have left us only a fraction to overcome ere we extinguish them utterly. But the fact that the pace already set is a hard one to follow should only stimulate us the more to do our utmost. If anything more is needed to make us realize that our problem in these matters is one to challenge the best there is in us, the knowledge that this "residuum" of preventable disease, passed on to us to extinguish, is of necessity the hardest part to stamp out, else it would have been stamped out already, ought to make us realize the magnitude of our task. Constantly each year deaths from typhoid, diphtheria, consumption, pneumonia; a less constant but considerable number from scarlet fever, measles, whooping cough, infantile paralysis and

epidemic meningitis; and a largely unknown but unquestionable large number of deaths from syphilis and gonorrhea, stand between us and the realization of Pasteur's prophecy.

ESSENTIALS FOR CONTROL.

This is our problem. What are the means that we must depend upon to solve it? To my mind the principal factors in the solution are:

1. A well working system of prompt reports of all communicable diseases to the health authorities from the physicians.

2. A carefully worked out routine system of study, and prompt investigation of all outbreaks, by the health authorities; in other words, health authorities that know their business and are "on the job," with reasonable but not necessarily lavish, financial support behind them.

3. Regulations for the isolation and supervision of persons ill with contagious diseases, based upon both common sense and scientific knowledge, and the principles of maximum protection to the public with minimum inconveniences and hardship to the patient and family.

4. The safeguarding of certain important channels of disease transmission, especially the water and milk supplies.

5. The widest possible utilizing of certain public health machinery designed expressly to combat communicable diseases. Under this heading would come; (a) The public health laboratories, whether research laboratories, where a new knowledge of the nature of contagious disease is constantly being sought and found, or diagnostic laboratories, where the practicing physician and the officials of the boards of health can have the correctness of their diagnoses verified, or determine under what conditions it is safe to release quarantine restrictions; or laboratories where antitoxins, vaccines, and other preventive quative sera are prepared and distributed. (b) The dispensary and hospital for contagious diseases. Their obvious importance and significance need no special mention before an enlightened public. (c) Public health nursing organizations. (d) School medical inspection; and hygienic supervision.

6. The greatest of all forces at our disposal, that of education along public health lines, especially the education of children and mothers. Typhoid fever, scarlet fever, measles and whooping cough can certainly be reduced still further in this State, but it must be largely through educational means through the intelligent cooperation of all the citizens of the State. Our public health measures, our system of school hygiene, our boards of health, our whole machinery for health protection needs to be adjusted to this new concept. The greatest need in public health today is education along sanitary lines—the removal of old erroneous ideas and superstitions relative to the true nature of contagion and infection among the laity, and, to lesser extent, even among the medical profession. I do not believe that sanitarians stop to realize how tenacious these old ideas are, and how difficult it is for the laity to pick out the chaff from the wheat in the great sanitary grist that has gone through the mill of human intellect in the past few decades. All who have made even a superficial study of the marvelous growth of knowledge regarding the causation and prevention of disease that has occurred in the past fifty years cannot deny that what is most needed now is not so much more knowledge—further light, beneficial as this will be—but, assimilation of the knowledge the experts already possess. Sanitary science today is far more in need of its "Roosevelts" and "Billy Sundays" than it is of additional "Pasteurs" and "Listers." Or, as President Van Hise of Wisconsin University puts it: "We already know enough to double the crops and eradicate the infectious diseases of this entire State. What is most needed is wider practical education of the entire public so they will take advantage of the knowledge we already possess." This, therefore, is the greatest reason why the cause of public hygiene is not better supported and the principles of both private and public hygiene no better applied by our individual citizens—lack of rudimentary training in the principles of hygiene. Our great problem, then, as health officials, is to systematize, unify and coordinate our official health machinery so that we can turn all our resources as a unit against the ravages of preventable

disease. But even if we do this to a degree hitherto unprecedented, we will most assuredly fail in the accomplishment of our great object—the freeing of humanity from the weight of needless disease and suffering—unless at the same time we succeed in enlisting the general public with us.

This means hygienic education, and to bring this about we must have three great agencies. 1. The public press. 2. Individual teaching. 3. The schools. The press is always very willing to help, but the trained worker who knows how to put hygienic facts into attractive newspaper form is a most necessary and valuable asset in publicity work. Individual teaching should be conducted by public health officials locally, by State officials, and especially by public health nurses. In their daily routine work they should explain why certain courses of procedure are necessary, and not simply say that they must do thus and so. For example, in regard to the question of quarantine. The schools are our chief hope in spreading the doctrine of proper living and correct application of the laws of health. These means, I believe, should form the nucleus of public health cooperation in the control of communicable diseases.

Respectfully submitted,

W. G. BELL,
Sanitary Inspector.

ENFORCING THE SCREEN LAW

Along with many other municipal governing bodies, the West Tampa city council is determined to assist the State Board of Health in enforcing the state screen law during the approaching warm season, and before the month of March passes arrangements for rigid enforcement should be made in every municipality, large and small, in Florida.

The fact is recognized now by even the most ignorant people that the housefly is second to no agency as a disease-spreader, and improved health conditions always follow the installation of screens and abatement of the fly nuisance. State Health Officer Joseph Y. Porter and coworkers deserve credit for the campaign they have made in behalf of enforcement of this law, as well as other steps they have taken in behalf of community and individual cleanliness.

Screens are now required for all hotels, restaurants, meat markets, fruit stands, outbuildings and other places that come within the requirements of the law, and it is the duty of private citizens as well as officers of the law to see that the law is obeyed to the letter.—Tampa Times.

THE FLY

Here he comes!
Silent and insidious;
Gentle, yet perfidious,
No sound of drums
Hails his appearance.
Grimly gay,
Graceful yet pestiferous,
Joyously germiferous;
Nothing can stay
His interference.

Hear him buzz!
In his course ethereal,
Cleverly aerial,
Strange feats he does,
Sprite inauspicious!
By and by,
If you let him propagate,
All the town he'll devastate.
Get that fly
Blandly pernicious!

—Washington Star.

Veterinary Notes

HOW TO GET STATE VETERINARY SERVICE

It seems to be the common belief that a "rush" telegram sent to the State Board of Health will bring a state veterinarian on the next train, to ascertain the cause for trouble of any kind in live stock, from "loss of the cud," to "bots," or "hollow-horn."

The State Board of Health is willing and expecting to spend public money for the benefit of all the people; but, at the same time, it must exercise its own judgment in all these matters involving the expenditure of public funds. It does not, as a rule, detail men, upon telegraphic request, to visit animals sick from troubles that should be attended to by private practitioners of veterinary medicine, any more than it would undertake to perform a like service for human troubles.

The State Legislature provided for this phase of the veterinary work when it passed the following Section 2, of,

"DISEASES OF DOMESTIC ANIMALS"

Chapter 5933 (No. 64).

"AN ACT to Provide for the Prevention, Suppression and Control of Dangerous, Contagious and Infectious Diseases in Domestic Animals and Live Stock, and to Impose Certain Duties and Confer Certain Powers on the State Board of Health for Such Purposes.

Sec. 2. "That it shall be the duty of all practitioners of veterinary medicine, and of the owner of any animal or live stock afflicted with or suffering from any of the diseases mentioned in Section 1, of this Act, or pronounced, defined or declared by rule of said State Board of Health pursuant to the provisions of said Section 1, immediately upon gaining information of the existence of any such disease in or among such domestic animals or live stock, to report the same to the State Health Officer of the State of Florida. All such reports shall be in writing and shall describe the diseased animal or live stock, and shall give the name and address of the owner or person in charge thereof, and the place where the same are kept."

The State Board of Health, has, under authority of this Act, by rule, pronounced, defined and declared the following diseases to be contagious or infectious and dangerous to the life of other domestic animals or live stock, or to human beings, and, therefore, they are nuisances: Glanders, anthrax, blackleg, contagious pleuro-pneumonia or lung plague of cattle, rinderpest or cattle plague, hemorrhagic septicaemia, foot and mouth disease or aphthous fever of cattle, Southern cattle fever or Texas fever, sheep scab, mange of cattle, or horses, hog cholera, or swine plague, rabies or hydrophobia, maladie du coit or eldurine of horses, advanced or generalized tuberculosis, or tuberculosis of the udder.

Up to the present time, there have been no outbreaks of black-leg, contagious pleuro-pneumonia in cattle, hemorrhagic septicaemia, rinderpest, or cattle plague, foot and mouth disease, nor of maladie du coit of horses.

NOT ALL HOG CHOLERA

We had occasion, in our November number, to call attention to and re-print some advice given by Dr. Cary, State Veterinarian of Alabama, in his bulletin No. 185, entitled "Control of Hog Cholera." We took the liberty of stressing some of the advice relative to housing hogs, as a means of keeping them healthy, and we wish to say more on this important subject.

There can be no questioning the fact that many hogs die from being compelled to sleep in cold, wet, unsheltered pens.

It is just as true that a hog loves a dry, warm place to sleep in, as he loves a mud hole to wallow in. No animal is, by nature, dirty. Their habits seem dirty, by comparison. Man is as queer as other animals. He does not, generally, eat the cleanly horse and mule, but does eat the hog and chicken. Nature has fitted animals to lead a certain kind of life and, at the same time, has made them resistant to influences that would produce disease, in people. When, however, we bring animals under domestication and compel them to live in an environment suited to man's convenience, the natural power of resistance to disease is lost, to a considerable extent.

The hog, running wild, would no more select a cold, damp place for a bed, than would a sane person, and when we compel hogs, or other animals, to sleep in wet filth, we must expect them to sicken and die. This is especially true of young pigs.

Many letters reach this office relative to lung troubles in these animals, during cold, rainy weather. They are, almost always, cases of pneumonia brought on by exposure to bad weather. Had the animals even been given a chance to sleep in a warm bed, instead of shivering all night in a cold, damp pen, they probably would not have contracted the fatal disease.

Specimens have been examined here where all the serous cavities were chronically inflamed, and the disease seemed to be contagious. There was chronic inflammation around the heart, the lungs and the intestines. Lesions of hog cholera were not present. There is no hope for such pigs. They invariably die. The remedy we advise is **prevention**. Simply give the pigs a chance to sleep in a warm, dry bed.

LARGE AREA TICK-FREE

Areas amounting in the aggregate to 12,313 square miles, situated in the States of Alabama, Arkansas, Louisiana, Mississippi, North Carolina and Virginia, were freed from the tick quarantine on December 1st. Previous releases bring the total for the year's work to about 50,000 square miles—the greatest area released in any one year since systematic tick eradication was begun in 1906. At that time there were 741,515 square miles under quarantine; there are now 465,733 square miles, or less than two-thirds of the original area.

The new order releases the whole of five counties in Alabama, one in Arkansas, one in Louisiana, three in Mississippi, and three in North Carolina. In addition, parts of two counties in Alabama and one in Mississippi, and one in Virginia which were formerly under quarantine. All told, 20 counties are affected in whole or in part.

More territory—5,345 square miles—is freed by the new order in Alabama than in any other State. The success of the season's work there is attributed by Federal inspectors to the hearty cooperation of the State authorities, the county authorities, and the people in the communities concerned. This cooperation, it is said, sprang from a definite purpose to raise more and better cattle, and eradication of ticks has been accomplished in several instances by the importation of pure-bred stock and the erection of silos.

In Lowndes County, for example, two brothers built five concrete silos of 250 tons capacity each and brought in from Kentucky a \$1,200.00 Hereford bull and 55 Hereford cows for the purpose of raising pure-bred Herefords for the market. In Dallas County 32 registered bulls had been brought in by September 22nd and 15 new silos built.

As the work of eradication progressed, it became possible to ship into the open market cattle which had been Federally inspected and found to be free from ticks. The higher prices which these cattle brought demonstrated conclusively the value of the campaign. In Limestone County, which was freed in September, about 1,700 head of cattle that were shipped out in this way brought an average of \$10.00 a head more than the prices prevailing below the quarantine line. The cost to this county of freeing its 15,000 cattle from ticks is estimated at approximately 55 cents a head.

In counties with a greater number of cattle the cost of tick eradication per head has been considerably smaller than this. Thus, the 42,000 cattle in Marengo County were cleaned for less than 30 cents a head, the cost of each dipping being less than 3 cents. In this county 103 vats were built between March 15 and May 1, and 14 more at odd times thereafter. These, together with the 68 vats which had been in existence before, were sufficient to clean up the 978 square miles in the county in one season of systematic work.

Experience has shown that such work is possible only when the people themselves realize its importance. In the counties in which the campaign has been pushed to a successful issue this year, work was begun after the question had been submitted by these counties to the people at the polls and eradication carried by majorities of from 4 to 1 to 9 to 1. Thereafter the whole influence of the more progressive elements in the community was brought to bear upon the few recalcitrants who refused to dip their cattle. In the majority of cases this was sufficient to bring them into line without resort to legal proceedings, but where these were found necessary the local judges took pains to impress upon the defendants the fact that their individual preferences would not be permitted to thwart the will of the entire county.

This marks a distinct advance over previous years, when in some counties eradication had to be abandoned because the people were not sufficiently united in the matter to make effective work possible. No penalties were imposed upon those who refused to dip, and, in consequence, those who did dip found the task of getting rid of the tick an endless one. "Tick eradication," reports one Federal inspector, "is a work of the people."

Additional evidence on this point is afforded by the experience of one Alabama county which voted 9 to 1 for tick eradication in 1914, carried on preliminary work that summer, and began active work, under State quarantine, on April 15, 1915. Despite the large majority in the election, considerable opposition developed in one corner of the county, which culminated in July in the destruction by dynamite of three dipping vats. The vats were immediately rebuilt and rewards for the apprehension of the offenders were offered both by the State and County Live Stock Association. Dipping continued in this section, but it was somewhat irregular and unsatisfactory, and as a result only a part of the county is released on December 1. In that part of the county which is released tick eradication has been accompanied by the completion of 25 silos.

The following table gives the areas in square miles, by States, freed under the new order: Alabama, 5,345; Arkansas, 1,672; Louisiana, 420; Mississippi, 2,209; North Carolina, 2,620; Virginia, 47; total area released, 12,313.—Weekly News Letter, U. S. Department of Agriculture.

Summary of Public Health Administration, December

SOUTHWESTERN DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Lecture on Scarlet Fever to school children. Investigation of scarlet fever. Investigation cesspool nuisance; abatement ordered. Inspections by Sanitary Patrolman (violation of sanitary laws ordered abated): Screening Law—hotels 3, restaurants 1, lunch counters 2, dining rooms 1, dining or buffet cars 2, kitchens 1, meat shops, grocery stores 2, bakeries 1, fruit stands 2, miscellaneous 6; Surface Closet and Water Carriage Laws—private residence 1; Sanitary Nuisance Laws—cigar factory 1. Communicable diseases—smallpox 1 (Dunedin), tuberculosis 1, scarlet fever 1, diphtheria 29.

Lake Magdelene: Treatment of indigent diphtheria cases.

Bradentown: Inspection of dairies.

Dunedin: Investigation and management case smallpox.

WESTERN DISTRICT

Pensacola: Routine work, Acting Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections by Sanitary Patrolman, as follows: Screening Law—grocery stores 13; Surface Closets and Water Carriage Laws—private residences, etc., 1,270, (466 violations found and abatements ordered). Communicable Diseases, fumigations, releases, etc.—tuberculosis 10, scarlet fever 1, diphtheria 1.

SOUTH TROPIC DISTRICT

Key West: Routine work, office of Assistant to the State Health Officer. Fourteen smallpox vaccinations performed. Inspections to determine if fly-proof privy law complied with. Investigation of all complaints, and where possible, nuisances abated. Matter of manure storage taken up with several collectors. Screening laws rigidly enforced. Routine laboratory work.

SOUTH CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer. Inspection of primary school with city physician. Inspection of dairies in and around Ocala.

Winter Garden: Conference regarding diphtheria with school trustees concerning prevention and devising means for stopping spread. Talks to pupils of school on Contagious Diseases.

Burbank: Investigation reported cases of smallpox; diagnosis of chickenpox.

CENTRAL DISTRICT

Gainesville: Routine work, office of Assistant to the State Health Officer.

Waldo: Smallpox, 2 cases; isolation and vaccination of exposed individuals. Four visits to Waldo to deliver lectures to high school on Public Health and Hygiene. Second visit to supervise smallpox situation.

Alachua: Investigation of dysentery; microscopical diagnosis of bacillary type. Four visits to Alachua to deliver lectures to high school on Public Health and Hygiene.

Archer: Diphtheria, one case, laryngeal type; death in twenty-four hours. Immunizing antitoxin to members of family; disinfection of house. Four visits to Archer to deliver lectures to high school on Public Health and Hygiene.

Dowling Park: Inspection of school privies.

High Springs: Four lectures delivered on Public Health and Hygiene to high school students.

Newberry: Four lectures delivered on Public Health and Hygiene to high school students.

Micanopy: Four lectures delivered on Public Health and Hygiene to high school students.

Hawthorne: Four lectures delivered on Public Health and Hygiene to high school students.

Trenton: Two lectures delivered on Public Health and Hygiene to high school students.

EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer.

Titusville: Conference with Superintendent of Public Instruction of Brevard County, and town council, as to best method for managing diphtheria situation. With assistance of three local physicians, swabs taken of throats of all teachers and pupils of Titusville public schools; instructions left with local health officer for isolating all positive cases.

Ormond: Investigation of cases of typhoid fever, upon request of Mayor; investigation some cases of unknown skin disease reported by County Superintendent of Public Instruction of Volusia County.

DeLand: Investigation and management of smallpox outbreak.

WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Bacteriologist and Assistant to the State Health Officer. Mallein test made for glanders in horse.

Olustee: Investigation of smallpox outbreak; vaccination of contacts; instructions.

Bradfordville: Visit to case of diphtheria with attending physician; swabs taken from family; instructions left.

EXECUTIVE OFFICE

Jacksonville: Routine work, office of Assistant to the State Health Officer. Investigation of several complaints relative to alleged sanitary nuisances in vicinity of Jacksonville. School inspection for determination of diphtheria carriers. Supervision of equipping exhibit train, purchase of exhibit material and installation of exhibits.

SPECIAL DETAILS

Bradentown: Complete sanitary survey at the request of Civic Committee of the Friday Literary Club.

Lithia: Visit to three cases of rural typhoid fever. Inspection of environs and preventive measures instituted.

Dover: Assistance to examining physician in the inspection of school; sanitary inspection of building and toilets.

Leesburg: Investigation of diphtheria situation. Conference with physicians, editor and several citizens.

Wildwood: Talk with mayor, members of council and citizens, urging passage of model ordinance for vital statistics.

Trapnell: Assistance in inspection of school, environs of building, etc. Visit to case of diphtheria with attending physician.

Coronet: Visit to case of scarlet fever with attending physician.

Tampa: Submission of specimens and conference with laboratory physicians.

Plant City: Routine duties; correspondence regarding milk inspection, dumping of night soil into specially constructed manholes so as to avoid production of nuisance at Imhoff Tanks, and examination of water from new well, etc. Examination of specimens. Visit cases of diphtheria, tuberculosis with attending physicians; collection of data.

EDUCATIONAL HEALTH EXHIBIT

Arrival of train at Jacksonville. Installation of exhibit material into cars.

PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes," Vol. X, No. 12, December, 1915, pp. 32. Press service bulletins to Florida newspapers: December 1, "Hysterical Disinfection;" December 8, "Climate and Health;" December 15, "Colds, Etc.;" December 22, "Christmas;" December 29, "Cattle Ticks."

Publications out in December: none.

Distribution of literature during December, on request: Housefly 69, Tuberculosis 82, Hookworm 199, Ophthalmia Neonatorum 3, Smallpox 25, Rules and Regulations of the State Board of Health and Public Health Laws 49, Sewage Disposal 37, Cattle Tick Eradication 8, Malaria 25, Mosquitoes 10, Measles 17, Imhoff Tanks 10, Common Sense in Contagion 8, Baby Welfare 7, Typhoid Fever, 26, Pure Water 11, Serum Treatment of Hog Cholera 35, General Sanitary Management 12, Hookworms in Dogs 11, Medical Inspection of School Children 15, Chemical Treatment of Water 15, Pellagra 18, The Sanitary Privy 610, Whooping Cough 7, Save the Babies 12, Diphtheria 15, Annual Reports 5.

Total	1,341
Health Notes, December, mailing list.....	8,725
Press service bulletins to newspapers, 5 issues.....	1,375

Grand total number pieces literature distributed in December.....	11,441
Number pieces literature distributed in 1915.....	152,413

VITAL STATISTICS

Cities of Florida which have passed Model Ordinance for reporting births and deaths: Apalachicola, Apopka, Auburndale, Avon Park, Bartow, Belleview, Bradentown, Branford, Bushnell, Callahan, Carrabelle, Caryville, Center Hill, Chipley, Citra, Clearwater, Coleman, Cottondale, Crescent City, Cypress, Dade City, Dania, Daytona, Daytona Beach, DeFuniak Springs, Deland, Delray, Dunedin, East Millville, Eatonville, Eau Gallie, Estero, Eustis, Fargo, Fellsmere, Fernandina, Florida City, Fort Lauderdale, Fort Meade, Fort Myers, Fort Pierce, Gainesville, Glendale, Gulfport, Greensboro, Horsford, Interlachen, Jacksonville, Jasper, Key West, Kissimmee, Lake Butler, Lake City, Lake Helen, Lake Worth, Lakeland, Largo, Laurel Hill, Lawtey, Leesburg, Live Oak, Lynn Haven, Macclenny, Manatee, Marianna, Melbourne, Miami, Milton, Molino, Mount Dora, Mulberry, Newberry, Noma, Ocala, Okeechobee, Orange Park, Orlando, Ormond, Pablo Beach, Palatka, Palmetto, Panama City, Pensacola, Pinellas Park, Plant City, Pompano, Ponce de Leon, Port Tampa City, Punta Gorda, Quincy, Reddick, St. Andrews, St. Augustine, St. Cloud, St. Petersburg, Sanford, Sarasota, Sebring, Sopchoppy, South Jacksonville, Starke, Stuart, Taft, Tallahassee, Tampa, Tarpon Springs, Tavares, Titusville, Umatilla, Wauchula, Wellborn, West Palm Beach, West Tampa, Williston, Winter Haven, Winter Park, Zephyrhills, Zolfo.

Total number of municipalities having passed Model Ordinance to December 1st, 1915 (1 during December).....	118
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SMALLPOX

Reported cases of smallpox in Florida, December, 1915:

DeLand, Volusia County.....	14
Dunedin, Pinellas County.....	1
Jacksonville and vicinity, Duval County.....	1
Olustee, Baker County.....	1
Titusville, Brevard County.....	2
Total number cases reported in December, 1915.....	19
Total number of cases reported in 1915.....	236

STATUS OF TUBERCULOSIS DISTRICT NURSING FOR YEAR ENDED DEC. 31, 1915

(Figures for Western and Southwestern Districts cover a period of 12 months; those for the Central, North Central and West Central, 6 months; East Coast, 4 months.)

<i>Residence of Cases Visited During 1915 by Towns and Districts</i>	<i>Number of Cases Visited During 1915</i>	<i>Cases Found to Have Died 1915</i>	<i>Cases Removed During 1915</i>	<i>Cases Apparently Cured During 1915</i>	<i>Number Patients Under Instruction Dec. 31, 1915</i>	<i>Number Patients Following Instructions</i>
WESTERN DISTRICT.....	211	74	26	10	104	66
Alliance	1	1	..	..	..	..
Altha	1	..	..	..	1	..
Bagdad	1	..	..	..	1	1
Baker	1	..	..	..	1	1
Barth	1	..	..	..	1	1
Big Bayou	1	1	..	..	..	..
Blackman	3	..	..	..	3	3
Blountstown	6	..	1	..	5	5
Bluff Springs	3	1	..	..	2	2
Campbellton	1	1	..	..	..	..
Cantonment	2	1	..	..	1	1
Century	1	1	..	..	..	..
Chipley	7	..	1	1	5	2
Camp Walton	1	..	..	..	1	1
Clarksville	1	1	..	..	..	..
Cottage Hill	2	..	1	..	1	1
Cottondale	2	..	1	..	1	1
Dady	1	..	..	..	1	1
Delwood	1	..	..	..	1	..
Darlington	1	..	..	..	1	1
DeFuniak Springs	11	3	2	1	5	1
Escambia	1	..	..	..	1	1
Fountain	1	1	..	..	..	..
Graceville	2	1	1	..	..	..
Greenwood	2	1	..	..	1	1
Holt	5	..	..	..	5	2
Jay	5	1	2	..	2	..
Laurel Hill	3	1	..	..	2	1
Malone	5	1	..	..	4	1
Marianna	7	5	..	..	2	1
McDavid	5	..	..	..	5	5
McKinnonville	2	1	..	..	1	1
Millville	1	..	..	..	1	1
Milton	3	2	..	..	1	1
Molino	3	1	..	..	2	1
Mossey Head	2	1	..	..	1	1
Munson	2	1	..	..	1	1
Muscogee	2	..	..	..	2	1
Noma	3	..	..	..	3	3
Oak Grove	4	1	..	..	3	1
Pace	1	..	..	..	1	1
Panama City	4	..	2	2	1	..
Paxton	2	..	..	1	1	1
Pensacola	67	34	13	4	18	11
Piney Woods	1	1	..	..	..	..
Pine Barren	1	..	..	..	1	1
Ponce de Leon	8	4	..	..	4	..
Roberts	1	..	..	..	1	1
Scotts Ferry	4	..	..	..	2	1
Sneads	4	..	2	1	1	..
Southport	1	..	..	..	1	1
St. Andrews	1	1	..	..	..	..
Vernon	1	1	..	..	..	..
Wasau	2	1	..	..	1	1
Westville	6	4	..	..	2	1
Wewahitchka	2	..	..	..	2	2
SOUTHWESTERN DISTRICT..	212	42	20	4	148	113
Apopka	1	..	..	..	1	..
Arcadia	3	..	..	..	3	3
Bartow	3	..	..	..	3	3
Baum	1	..	..	..	1	..
Bellair	1	..	..	..	1	1
Bowling Green	1	..	..	..	1	1
Bradentown	4	..	..	..	4	3
Brewster	1	..	..	..	1	1
Clearwater	5	3	..	1	2	2
Durant	1	..	..	..	1	1

<i>Residence of Cases Visited During 1915 by Towns and Districts</i>	<i>Number of Cases Visited During 1915</i>	<i>Cases Found to Have Died 1915</i>	<i>Cases Removed During 1915</i>	<i>Cases Apparently Cured During 1915</i>	<i>Number Patients Under Instruction Dec. 31, 1915</i>	<i>Number Patients Following Instructions</i>
Dunedin	1	..	..	..	1	1
Ft. Meade	4	..	..	..	4	3
Ft. Myers	2	..	..	..	2	2
Ft. Ogden	2	..	..	..	2	2
Frost Proof	1	..	..	..	1	1
Geneva	2	..	..	..	2	2
Gulf City	1	..	..	..	1	1
Gulfport	3	1	..	1	1	1
Haines City	1	..	..	..	1	1
Kathleen	2	..	..	..	2	2
Kissimmee	1	1	..	..	..	..
Lakeland	41	10	1	..	30	20
Mulberry	4	..	2	..	2	2
Oakhurst	1	..	1	1	..	..
Orlando	5	1	..	..	4	2
Oviedo	1	..	..	..	1	1
Palmetto	1	1	..	..	..	..
Parish	1	1	..	..	..	..
Pierce	2	..	1	..	..	1
Plant City	11	2	1	..	8	8
Port Tampa	3	2	..	..	1	1
Punta Gorda	2	1	..	..	1	1
Safety Harbor	1	..	..	..	1	1
Sanford	4	..	..	..	4	4
Sarasota	4	..	1	..	3	2
Silver City	1	..	..	..	1	1
St. Cloud	1	..	..	..	1	1
St. Petersburg	8	1	1	..	6	6
Sutherland	1	..	..	..	1	1
Tampa	63	15	12	..	36	20
Tarpon Springs	9	1	..	1	7	5
Wall Springs	1	..	..	..	1	1
Waverly	1	1	..	..	..	..
Wauchula	2	..	..	..	2	2
Winter Park	1	..	..	..	1	1
Wimauma	2	1	..	..	1	1
CENTRAL DISTRICT	173	37	33	9	92	79
Alachua	2	..	..	..	2	2
Archer	2	..	..	1	1	1
Bell	1	..	..	..	1	1
Bellevue	1	1	..	..	..	..
Boardman	1	..	1	..	..	..
Brooksville	7	2	..	..	5	3
Bronson	1	1	..	..	..	..
Bushnell	2	..	..	..	2	2
Campville	1	..	..	..	1	1
Cedar Keys	2	1	..	..	1	1
Citra	2	..	..	..	2	2
Clermont	1	..	1	..	..	..
Conant	1	..	..	..	1	1
Crystal Springs	1	..	1	..	..	..
Dade City	3	..	1	1	1	1
Dunnellon	5	3	1	1	..	..
East Lake	1	..	..	..	1	1
Electra	1	1	..	..	..	..
Eustis	10	3	1	1	5	5
Fairbanks	1	..	..	..	1	1
Fairfield	1	..	..	..	1	1
Floral City	1	..	1	..	..	..
Fruitland Park	2	..	..	..	2	..
Gainesville	16	4	3	2	7	7
Greer	1	..	..	..	1	1
Grove Park	4	1	..	..	3	3
Hague	1	..	..	..	1	1
Hawthorne	1	1	1	..	1	..
High Springs	1	1	..	..	..	..
Inverness	3	1	..	..	2	2
Island Grove	1	..	..	..	1	1
Kendrick	1	..	..	..	1	1
Lady Lake	3	..	..	..	3	3
Leesburg	5	..	1	..	4	3
Lowell	1	..	1	..	..	..

<i>Residence of Cases Visited During 1915 by Towns and Districts</i>	<i>Number of Cases Visited During 1915</i>	<i>Cases Found to Have Died 1915</i>	<i>Cases Removed During 1915</i>	<i>Cases Apparently Cured During 1915</i>	<i>Number Patients Under Instruction Dec. 31, 1915</i>	<i>Number Patients Following Instructions</i>
Loyce	1	..	..	..	1	1
Lukens	1	..	..	..	1	1
Martin	1	..	..	..	1	1
Micanopy	2	1	..	..	1	1
Melrose	1	1	..	..	..	..
Meredith	1	..	..	..	1	1
Montbrook	1	1	..	..	..	..
Morrison	1	1	..	..	..	..
Newberry	2	..	..	..	2	2
Ocala	14	6	..	..	8	4
Oklawaha	2	2	..	..	..	..
Orange Heights	1	..	1	..	3	3
Otter Creek	5	..	..	..	3	4
Oxford	10	..	4	1	5	4
Reddick	6	..	2	..	4	4
Rochelle	1	1	..	..	..	..
San Antonio	2	1	..	..	1	1
Socastee	3	1	..	..	2	2
Sparr	1	1	..	..	..	..
Summerfield	1	..	1	..	..	..
Sumner	1	..	1	..	..	..
Tavares	4	1	..	..	3	3
Trenton	1	..	..	..	1	1
Trilby	6	..	6	..	..	..
Waldo	3	..	..	1	2	2
Weirsdale	2	..	..	..	2	..
Wildwood	1	..	1	..	..	..
Williston	6	..	4	1	1	1
Zephyrhills	2	..	..	..	2	2
NORTH CENTRAL DISTRICT..	191	11	3	1	176	70
Bakers Mill	1	..	..	..	1	..
Baldwin	5	1	..	..	4	3
Branford	5	..	..	..	5	..
Bayard	2	..	..	..	2	..
Callahan	4	..	..	..	4	3
Crescent City	6	..	..	..	6	4
Crawford	1	..	..	..	1	..
Dowling Park	2	..	1	..	1	..
Falmouth	4	..	..	..	4	..
Fernandina	2	..	..	..	2	1
Ft. White	1	..	..	..	1	..
Geneva	4	..	..	..	4	..
Green Cove Springs	2	..	..	..	2	2
Gilmore	1	..	..	..	1	..
Grandin	1	..	..	..	1	..
Hampton	3	..	..	..	3	2
Hilliard	1	..	..	..	1	..
Jacksonville (out)	15	2	..	..	13	9
Jasper	9	..	..	..	9	..
Jennings	1	..	..	..	1	1
Lake Butler	3	..	..	..	3	2
Lake City	9	2	..	..	7	4
Lake Geneva	4	..	..	..	4	..
Lawtey	4	2	1	..	1	1
Live Oak	8	..	..	..	8	2
Lulu	3	..	..	..	3	..
Macclenny	5	..	..	..	5	5
Mayport	3	1	..	..	2	..
Melrose (out)	3	..	..	..	3	..
Mandarin	1	..	..	..	1	..
Maxwell	1	..	..	..	1	..
O'Brien	2	..	..	..	2	..
Ortega	1	..	..	..	1	..
Padlock	1	..	..	..	1	..
Palatka	15	2	..	..	13	5
Putnam Hall	1	..	..	..	1	..
Sanderson	1	..	..	..	1	1
South Jacksonville	4	..	..	..	4	3
San Mateo	1	..	..	..	1	..
Starke	13	..	..	..	13	8
Tisonia	1	..	..	..	1	..
Watertown	3	1	..	1	1	1

<i>Residence of Cases Visited During 1915 by Teams and Districts</i>	<i>Number of Cases Visited During 1915</i>	<i>Cases Found to Have Died 1915</i>	<i>Cases Removed During 1915</i>	<i>Cases Apparently Cured During 1915</i>	<i>Number Patients Under Instruction Dec. 31, 1915</i>	<i>Number Patients Following Instructions</i>
Welaka	3	..	..	..	3	3
Wellborn	23	..	1	..	22	10
West Lake	2	..	..	..	2	..
White Springs	1	..	..	..	1	..
Yulee	5	..	..	..	5	..
WEST CENTRAL DISTRICT.....	162	31	6	6	119	70
Alton	2	..	..	..	2	..
Ashmore	1	..	..	..	1	..
Apalachicola	10	2	..	1	7	5
Aucilla	4	1	..	..	3	2
Carbur	3	..	3	..	..	..
Carrabelle	3	1	..	..	2	1
Chaires	1	..	..	..	1	..
Chattahoochee	4	1	..	..	3	2
Cherry Lake	1	..	..	..	1	1
Concord	4	..	..	1	3	2
Crawfordville	1	..	..	..	1	1
Day	1	1	..	..	..	..
Drifton	1	..	..	..	1	..
Greensboro	2	..	..	..	2	..
Greenville	8	..	..	1	7	5
Gretna	2	..	..	..	2	1
Hanson	2	..	..	..	2	..
Havana	5	..	..	..	5	2
Hinson	1	..	1	..	..	..
Hosford	1	..	..	..	1	1
Lamont	1	..	..	..	1	1
Lee	5	2	..	..	3	2
Lloyds	2	..	1	..	1	..
Madison	12	4	..	..	8	5
Mayo	1	1	..	..	..	..
Monticello	9	3	..	..	6	4
Perry	10	2	1	..	7	5
Pinetta	4	..	..	..	4	3
Quincy	20	4	..	..	16	8
River Junction	3	2	..	..	1	..
Sopchoppy	6	..	..	..	6	5
Sumatra	1	..	..	..	1	1
Tallahassee	21	6	..	3	12	7
Wacissa	1	..	..	..	1	..
Waukeemah	6	1	..	..	5	1
Woodville	3	..	..	..	3	1
EAST COAST DISTRICT.....	276	23	13	1	240	233
Arch Creek	1	1	..	..	..	..
Assembly Beach	2	..	1	..	1	..
Aurentia	2	..	1	..	1	1
Barberville	2	1	..	..	1	1
Buena Vista	2	..	..	..	2	2
Boynton	4	..	..	..	4	4
Bunnell	4	..	..	..	4	4
Camp Cossogoda	2	..	..	..	2	2
Canaveral	1	..	..	..	1	1
Cokesberry	1	..	1	..	..	..
Dania	5	..	..	..	5	5
Daytona	9	..	..	..	9	9
Daytona Beach	5	..	..	..	5	5
Deerfield	2	..	..	..	2	2
DeLand	8	1	..	..	7	7
DeLeon Springs	7	..	..	..	7	7
Delray	5	..	..	..	5	5
Durbin	1	..	..	..	1	1
Elkton	7	..	..	..	7	7
Emporia	7	..	..	..	7	7
Enterprise	1	1	..	..	..	..
Fellsmere	4	..	..	..	4	..
Florida City	1	..	..	..	1	1
Ft. Lauderdale	14	1	..	..	13	13
Ft. Pierce	10	3	..	..	7	7
Fulford	1	..	1	..	..	..
Gifford	1	..	..	..	1	1
Glencoe	2	..	..	..	2	2

<i>Residence of Cases Visited During 1915 by Town and Districts</i>	<i>Number of Cases Visited During 1915</i>	<i>Cases Found to Have Died 1915</i>	<i>Cases Removed During 1915</i>	<i>Cases Apparently Cured During 1915</i>	<i>Number Patients Under Instruction Dec. 31, 1915</i>	<i>Number Patients Following Instructions</i>
Glenwood	1	..	..	..	1	1
Hallandale	1	..	..	..	1	1
Hastings	6	..	..	..	6	6
Hawks Park	1	..	1	..	..	..
Hopkins	4	..	..	..	4	4
Holly Hill	1	..	..	..	1	1
Hurds	1	..	..	..	1	1
Hypoluxo	2	..	..	..	2	2
Indian River City	1	..	..	..	1	1
Jensen	1	..	..	..	1	1
Key West	44	7	3	1	33	33
Kingston	1	..	..	..	1	1
Korona	1	..	..	..	1	1
Lantana	1	1	..	..	..	..
Lake Helen	3	..	..	..	3	3
Lake Worth	6	..	..	..	6	6
Larkin	3	..	..	..	3	3
Lyreta	1	..	..	..	1	1
Malabar	2	..	..	..	2	2
Melbourne	2	..	..	..	2	2
Miami	19	2	..	..	17	17
Micco	1	..	..	..	1	1
Mims	1	..	..	..	1	1
Moultrie	2	..	..	..	2	2
New Augustine	5	2	..	..	3	3
New Smyrna	5	..	1	..	4	4
Oak Hill	3	..	1	..	2	2
Okeechobee	1	..	..	..	1	1
Orange City	3	..	..	..	3	3
Osteen	5	..	1	..	5	4
Perrine	1	..	..	..	1	1
Pierson	2	..	..	..	2	2
Pompano	3	2	..	..	1	..
Port Orange	2	..	..	..	2	2
Princeton	2	..	..	..	2	2
Quay	4	..	..	..	4	4
Seville	2	..	..	..	2	2
Stuart	1	..	..	..	1	1
Titusville	5	..	..	..	5	5
Tocoi	1	..	1	..	..	..
Twin Oaks	1	..	..	..	1	1
Valkaria	1	..	..	..	1	1
Vero	1	..	..	..	1	1
Wabasso	2	..	..	..	2	2
West Palm Beach	9	1	1	..	7	7
Number cases of tuberculosis visited by nurses during 1915.....	1,225					
Number cases found to have died during 1915.....	218					
Number cases removed and not again found, during 1915.....	101*					
Number cases apparently recovered from tuberculosis in 1915.....	31					
Number cases under instruction by nurses, Dec. 31, 1915.....	879					
Number cases known to be following instruction, Dec. 31, 1915.....	631					

* Includes 3 cases locating in other districts and again found.

CRIPPLED CHILDREN

NAMES		In St. Lukes 12-1-15	In Brewster (Col.) 12-1-15	Outside Treatment 12-1-15	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment	Examined, Not Admitted	Total Cases During Month	Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment Jan. 1st, 1916
A. N.	1									1			Tbc. Spine.....	1
F. P.	1									1			Tbc. Hip.....	1
H. M.	1									1				
										1	Circumcision and			
										1	Cast 15		Tbc. Ileum.....	1
A. H.	1									1	Cast left 8th.....		Polio Deformity	1
M. P.		1								1			Lat. Curv. Spine	1
L. H.			1							1	Cast 5th.....		Club Feet.....	1
R. F.			1							1			Polio. Par. Def..	1
W. W.			1							1			Polio. Paralysis..	1
B. Y.			1							1			Polio. Paralysis..	1
R. G.	1									1	Cast 10th.....		Club Feet.....	1
C. W.	1									1	Tenotomies and cast			
										1	right 30th; cast left		Club Feet.....	1
										1	22nd.....		Club Feet.....	1
B. K.			1							1	Cast 6th.....		Club Feet.....	1
R. W.	1									1			Def. Spa. Par...	1
O. D.	1									1			Tbc. Spine.....	1
S. W.		1								1			Lat. Curv Spine	1
R. McL.				1	7th					1	Osteotomies and			
										1	Casts both legs 28th		Bow Legs.....	1
D. W.				1	3d					1	Tenotomies, Oste-			
										1	tomy and cast R.			
										1	foot 4th, Tenotomies		Club Feet.....	1
										1	and cast left 15th			
Total	8	1	6	2	..	..	..	..	..	17				17

BIOLOGICAL PRODUCTS

Distribution of Biological Products during December (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigently only). Number of persons receiving treatment.

County and Town	Anti-Smallpox Vaccine	Anti-Rabic Vaccine	Anti-Typhoid Vaccine	Diphtheria Antitoxin Curing and Immunizing	Tetanus Antitoxin Immunizing
BAKER					
Olustee	10	..	..	..	..
DUVAL					
Jacksonville	30	..	..	17	2
DeSOTO					
Wauchula .....	..	..	2	..	..
ESCAMBIA					
Pensacola .....	..	..	2	..	..
HAMILTON					
Jasper .....	..	..	..	1	..
HILLSBOROUGH					
Tampa	100	..	..	7	..
LAKE					
Leesburg .....	..	..	..	2	..
MONROE					
Key West	20	..	..	1	..
POLK					
Bartow .....	..	..	..	1	..
Lakeland .....	..	..	..	2	..
PUTNAM					
Palatka .....	..	..	..	1	..
SEMINOLE					
Chuluota	20	..	..	..	..
ST. LUCIE					
Okeechobee	20	..	..	..	..
VOLUSIA					
DeLand	50	..	..	..	..
WALTON					
DeFuniak Springs .....	..	..	2	1	..
Total.....	250	..	6	33	2

Total number vaccinations done in 1915.....	15,861
Total number persons receiving Pasteur treatment in 1915.....	57
Total number persons receiving anti-typhoid vaccine in 1915.....	242
Total number persons receiving diphtheria antitoxin in 1915.....	296
Total number persons receiving tetanus antitoxin in 1915.....	10

BACTERIOLOGICAL LABORATORIES
SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Tallahassee	Total
Animal Parasites	117	94	20	2	19	6	258
Diphtheria	1,133	260	143	5	40	153	1,734
Gonorrhoea	82	47	44	2	1	9	185
Malaria	133	106	19	1	25	71	355
Pathological	12	7	5	..	..	..	24
Rabies .....	..	..	..	..	..	1	1
Tuberculosis	95	80	27	1	21	59	283
Typhoid	120	94	21	..	21	25	281
Water: Bacterial Exam.....	16	6	..	1	33	..	56
Miscellaneous	39	46	12	3	71	19	190
	1,747	740	291	15	231	343	3,367

Total number of specimens examined by the Laboratories of the State Board of Health during December, 1915..... 3,367

DISTRIBUTION OF DISEASES DETERMINED BY BACTERIOLOGICAL
LABORATORIES, DECEMBER, 1915

(MALARIA)

TOWN	Diphtheria	Gonorrhoes	Etiocautumal	Quarant	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Tapeworm	Trichinosis	Oxyuris	Ascariis	Ameba	Rabies	Total
Alachua	1															1
Altam							1									1
Apalachicola								1								1
Apopka	1															1
Arcadia	1															1
Archer									1							1
Avon Park	1															1
Bartow								1								1
Bradentown					1			1	1							3
Carrabelle							1									1
Cedar Key							1									1
Centralia		1														1
Chattahoochee			1					1								2
Chiefland									2							2
Citra								1								1
Clearwater								1								1
Cross City									4							4
Dade City							1									1
Dania								1		1		1				3
DeFuniak Springs	10						1									11
Release Cult.	6															6
DeLand							1	1	1							3
Ft. Lauderdale								1								1
Ft. Meade	1															1
Gainesville	1															1
Grandin	3															3
Greenville								1								1
Hilliard									1							1
Homestead	1															1
Interlachen					1											1
Jacksonville	23	13	4			6	6	4	9	1	1	1				68
Release Cult.	95															95
Carrier Cases	30															30
South Jacksonville																
Release Cult.	19															19
Jasper									1							1
Key West		2									1					3
Kissimmee	1						1	1								3
Lake City		1														1
Lake Magdalene	7															7
Lake Worth	1															1
Lakeland	1							1								2
Lemon City	1							1								2
Leesburg	1								2							3
Live Oak							1									1
Mt. Dora								1								1
Madison		1														1
Melbourne								1								1
Miami	2						5	3	1							11
Monticello	4						1								1	6
Morrison									1							1
New Smyrna		1														1
Ocala	2							2	3							7
Odessa							1	1								2
Okeechobee, Rel C.	2								1							3
Oklawaha	2															2
Orlando		3						4	3							10
Ozona	1															1
Palatka							1									1
Panama City									2					1		3
Pensacola	1	6			2			8								25
Plant City	2	2				1	2	3								10
Release Cult.	1															1
Princeton													1			1
Punta Gorda							1									1
St. Andrews								1								1
St. Augustine			1			1		1								4
St. Petersburg		1						1	3		1					6
San Antonio									1							1

MALARIA

TOWN	Diphtheria	Gonorrhea	Etiocautummal	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Tapeworm	Trichinosis	Oxyuris	Ascaris	Ameba	Rabies	Total
Safety Harbor	1															1
Sanford								1								1
Sebastian									1							1
Sorrento								1								1
Stuart								1								1
Tallahassee	5	3	1				2	4	1				1			17
Tampa	14	16					10	9	6	1			5			61
West Tampa													2			2
Tarpon Springs								1								1
Titusville	6	1				1										8
Release Cult.	6															6
Carrier Cases	14															14
Warrington					1											1
Wauchula	1						1		2							4
Williston	2															2
Wimauma							1									1
Winter Garden	1															1
Winter Haven								1								1
Worthington Springs									1							1
Valrico								1								1
Zolfo								1								1
No data given	1															1
Total	272	52	7		5	10	39	60	60	2	4	1	9	1	1	523

VETERINARY DIVISION
TICK ERADICATION

Cattle dipping vats reported constructed during December, 1915:

Marion County, Irvine..... 1
 Total number of vats reported constructed to Jan. 1, 1916.....88

FEDERAL MONTHLY REPORT OF QUARANTINE STATUS DADE AND BROWARD COUNTIES

	Dade	Broward
1. Number of premises under quarantine at close of month.....	25	3
2. Number of cattle under quarantine at close of month.....	427	9
3. Number of premises inspected during month showing ticks.....	0	0
4. Number of cattle inspected during month showing ticks.....	0	0
5. Number of herds inspected during month showing ticks, not disinfected....	0	0
6. Number of cattle inspected during month showing ticks, not disinfected....	0	0
7. Number of new premises quarantined during month.....	0	0
8. Number of quarantined premises released during month.....	0	1
9. Number of vats in operation in Dade and Broward Counties.....	2	0
10. Number of days at work during this month.....	27	27
11. Number of quarantined premises not inspected during the month.....	0	0
12. Quarantined premises and cattle inspected every fourteen days.....		
13. General method of disinfecting cattle and premises is dipping and spraying with arsenical solution.....		

INTRASTATE SHIPMENTS OF DIPPED CATTLE INTO DADE AND BROWARD COUNTIES

Dec. 2, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Dec. 5, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Dec. 8, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Dec. 10, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Dec. 15, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Dec. 18, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Dec. 24, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Dec. 28, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Dec. 28, Fort Pierce to Miami.....	2	cattle
Total number of cattle.....	282	cattle
Total number of shipments.....	9	cattle

GLANDERS

Diagnosed by Veterinarian during December, 1915.....no cases
 Total number of cases in 1915, to January 1, 1916.....14 cases

IMPORTATION OF CERTIFIED LIVE STOCK INTO FLORIDA

Dec. 1,	Danville, Ky., to Wiersdale.....		27	mules
Dec. 1,	Quitman, Ga., to Zolfo.....	1 cow	1	horse
Dec. 2,	Fort Wayne, Ind., to Dundee.....		2	horses
Dec. 2,	Chicago, Ill., to Madison.....		30	mules
Dec. 3,	Danville, Ky., to Live Oak.....	1 hog		
Dec. 3,	St. Joseph, Mo., to Vero.....		2	mules
Dec. 3,	East St. Louis, Ill., to Madison.....		28	mules
Dec. 4,	Dickson, Tenn., to Ocala.....	3 cattle	2	horses
Dec. 5,	Macon, Ga., to Fulford.....	17 cattle		
Dec. 6,	Wheaton, Ill., to Gonzalez.....	1 cow		
Dec. 6,	Versailles, Ky., to DeLand.....	3 hogs		
Dec. 6,	Lebanon, Tenn., to Monticello.....		29	mules
Dec. 6,	Thomasville, Ga., to Tampa.....	19 cattle		
Dec. 6,	Havana, Cuba, to Tampa.....		2	horses
Dec. 7,	Springfield, Tenn., to Ona.....	3 hogs		
Dec. 7,	Chicago, Ill., to Monticello.....		28	mules
Dec. 8,	Chicago, Ill., to Live Oak.....		27	mules
Dec. 8,	Atlanta, Ga., to Jacksonville.....		26	horses
Dec. 8,	Watertown, Tenn., to Marianna.....	1 hog		
Dec. 9,	Atlanta, Ga., to Jacksonville.....		1	horse
Dec. 9,	Bowling Green, Ky., to Madison.....		24	mules
Dec. 9,	Charleston, W. Va., to Jacksonville.....		23	mules
Dec. 10,	Cantril, Iowa, to Martel.....	1 hog	4	mules
Dec. 10,	Tiffin, Ohio, to Lake Worth.....		1	horse
Dec. 10,	Atlanta, Ga., to Monticello.....		9	horses
Dec. 11,	Chicago, Ill., to Graceville.....		19	mules
Dec. 11,	Woodbury, Ga., to Jacksonville.....	26 cattle	6	mules
Dec. 11,	Thomasville, Ga., to Monticello.....		1	horse
Dec. 12,	Thomasville, Ga., to Ybor City.....	26 cattle	19	mules
Dec. 13,	Milledgeville, Ga., to Ekton.....	14 cattle		
Dec. 13,	Atlanta, Ga., to Monticello.....		6	horses
Dec. 14,	Willisville, Ill., to Miami.....	21 cattle	14	mules
Dec. 14,	Americus, Ga., to St. Andrews.....	1 hog		
Dec. 14,	Atlanta, Ga., to Ft. Myers.....		3	horses
Dec. 14,	Deerfield, Mo., to Milton.....		2	horses
Dec. 14,	Olmstead, Ill., to Live Oak.....		2	horses
Dec. 15,	Atlanta, Ga., to Lake City.....		4	horses
Dec. 15,	Winston, Ga., to Lake Alford.....	1 cow	20	mules
Dec. 15,	Nashville, Tenn., to Pensacola.....		1	horse
Dec. 15,	Talbotton, Ga., to Wauchula.....	2 hogs		
Dec. 16,	Atlanta, Ga., to Montbrook.....		2	mules
Dec. 16,	Oklahoma City, to Lake City.....		28	mules
Dec. 16,	Fingor, Tenn., to Lake Alford.....	3 hogs		
Dec. 16,	Enville, Tenn., to Gretna.....	1 hog		
Dec. 16,	Americus, Ga., to St. Andrews.....	1 hog		
Dec. 17,	Atlanta, Ga., to Ocala.....		20	mules
Dec. 18,	Russelville, Ky., to Bonifay.....	1 hog		
Dec. 18,	Baton Rouge, La., to Grant.....		21	mules
Dec. 19,	Birmingham, Ala., to Winter Haven.....	2 cattle	4	mules
Dec. 20,	Reeves, Ga., to Couterland.....	1 hog		
Dec. 21,	Chicago, Ill., to Starke.....		26	mules
Dec. 21,	Nashville, Tenn., to Lake City.....		1	horse
Dec. 22,	Chicago, Ill., to Jacksonville.....		27	horses
Dec. 22,	Atlanta, Ga., to Jacksonville.....			
Dec. 22,	Gleason, Tenn., to Midway.....	1 hog	20	mules
Dec. 23,	Havana, Cuba, to Key West.....		1	horse
Dec. 24,	Jenning, Okla., to Dundee.....		1	horse
Dec. 25,	Paducah, Ky., to Live Oak.....	5 horses	2	mules
Dec. 28,	Chicago, Ill., to Lakeland.....	28 horses		
Dec. 28,	Cincinnati, Ohio, to Narcoossee.....	1 horse		
Dec. 28,	Bowling Green, Ky., to Madison.....		26	mules
Dec. 28,	Sapulpa, Okla., to Wauchula.....		2	horses
Dec. 28,	Valdosta, Ga., to Deerland.....		8	mules
Dec. 29,	Atlanta, Ga., to Jacksonville.....		9	horses
Dec. 29,	Valdosta, Ga., to Deerland.....		16	mules
Dec. 30,	Atlanta, Ga., to Jacksonville.....	3 horses	4	mules
Dec. 30,	Atlanta, Ga., to Jasper.....	1 horse	21	mules
Dec. 31,	Wilkes Barre, Pa., to Ormond.....	6 horses	25	mules
Totals:	horses, 148; mules, 548; cattle, 131; hogs, 19.....		846	
Total	number of shipments.....		68	

EXPORTATION OF CERTIFIED LIVE STOCK FROM FLORIDA

Dec. 1,	Fort Barrancas, to Fort Bliss, Texas.....	1 horse	
Dec. 15,	Jacksonville, to Ludowici, Ga.....	1 horse	
Dec. 27,	Jacksonville, to Ridgeland, S. C.....	1 bull	
Dec. 27,	Jacksonville, to Leslie, Ga.....	3 cattle	
Totals:	horses, 2; cattle, 4.....		6
Total	number of shipments.....		4

HOG CHOLERA AGENTS APPOINTED DURING DECEMBER, 1915

G. C. Hardy, Florahome, Putnam County.

HOG-CHOLERA SERUM DISTRIBUTION, DECEMBER, 1915

	C. C. Serum Distributed
Alachua	7,750 c.c.
Baker .....	..... c.c.
Bay .....	..... c.c.
Bradford	400 c.c.
Brevard .....	..... c.c.
Broward .....	..... c.c.
Calhoun .....	..... c.c.
Citrus	1,800 c.c.
Clay	1,600 c.c.
Columbia	3,550 c.c.
Dade .....	..... c.c.
DeSoto	750 c.c.
Duval .....	..... c.c.
Escambia .....	..... c.c.
Franklin .....	..... c.c.
Gadsden	1,700 c.c.
Hamilton .....	..... c.c.
Hernando .....	..... c.c.
Hillsboro	300 c.c.
Holmes .....	..... c.c.
Jackson	1,000 c.c.
Jefferson	1,400 c.c.
LaFayette .....	..... c.c.
Lake	600 c.c.
Lee	1,750 c.c.
Leon .....	..... c.c.
Levy	600 c.c.
Liberty	4,400 c.c.
Madison	1,000 c.c.
Manatee	2,350 c.c.
Marion	500 c.c.
Monroe	850 c.c.
Nassau .....	..... c.c.
Orange .....	..... c.c.
Osceola .....	..... c.c.
Palm Beach	1,000 c.c.
Pasco .....	..... c.c.
Pinellas .....	..... c.c.
Polk	1,500 c.c.
Putnam	1,250 c.c.
Santa Rosa	400 c.c.
Seminole .....	..... c.c.
St. Johns .....	..... c.c.
St. Lucie .....	..... c.c.
Sumter .....	..... c.c.
Suwannee	2,300 c.c.
Taylor .....	..... c.c.
Volusia .....	..... c.c.
Wakulla .....	..... c.c.
Walton	3,200 c.c.
Washington	500 c.c.

Total serum sold 600 c.c.

Total 42,450 c.c.

Estimated number of hogs treated, December.....	1,475
Estimated weight of hogs treated, December.....	89,975 lbs.
Amount of hog-cholera serum purchased during December.....	100,000 c.c.
Amount of hog-cholera virus purchased during December.....	..... c.c.
Cost of serum and virus purchased during December.....	\$1,000.00
Amount of serum distributed in 1915.....	1,973,800 c.c.
Amount of virus distributed in 1915.....	18,865 c.c.
Estimated number of hogs treated in 1915.....	94,554
Estimated weight of hogs treated in 1915.....	5,363,669 lbs.
Cost of serum and virus purchased in 1915.....	\$20,544.60

DETAILS PERFORMED BY THE VETERINARY DIVISION

Dec. 6, 2 mules and 41 hogs certified into Dade County; Dec. 9, 26 cows tested in Jacksonville; Dec. 9, 17 cattle dipped at Jacksonville; Dec. 11, 3 cattle dipped at Jacksonville; Dec. 12, 3 mules and 1 horse inspected for ticks; Dec. 12, 3 cattle dipped at Jacksonville; Dec. 12-13, investigation cattle disease at Micanopy; Dec. 13-14, cattle tested at Jacksonville; Dec. 22, made dip at Jacksonville; Dec. 23-25, testing 83 head cattle at Jacksonville.

Vital Statistics

BIRTH REGISTRATION

(Prepared by the Children's Bureau, U. S. Department of Labor)

Has the birth of your baby been registered? If not, you should see to it that this duty is performed without delay. It may some time be of the greatest importance to your child that there be in existence an accurate legal record of his birth, date, place, and parentage. Such a record serves to establish his age beyond question, and through this his right to the legal period of schooling and freedom from labor. It may also serve to establish his right to a disputed inheritance and to establish for him various property or other legal rights which may be in dispute. There are numerous instances where the lack of this sort of record has been the cause of serious losses of inheritance and of educational and other rights.

In New York City in 1913 the birth records helped to enforce the personal or property rights of more than 138,000 persons.

It is, in most states, required by law that the doctor, midwife, or other attendant at birth shall report the birth to the registrar of births, but as this duty is not infrequently neglected, parents should investigate to see whether it has been done properly in the case of their children.

The complete registering of all births is indispensable, not only to the individual, but to the state and the nation.

The Federal Government can and does tell us exactly how great is the accession to our population each year by immigration, or intake from foreign lands. At each port of landing immigration inspectors record each arrival and tell us his or her nationality, age, sex, destination, and how much money each one brings. But the Federal Government cannot go into the States and cities and establish registration offices and tell us how many children enter each State by birth. This work must be done by each State separately. We have no national bookkeeping to account for the ebb and flow of human life as an asset and a liability of our civic organism. We have no national records to give our sanitarians and students as a basis for their preventive studies. Congress by resolution has urged the States to enact and enforce suitable registration legislation. The State government must now act.

Most of the States now have adequate laws; their enforcement, however, depends to a large extent upon popular support. This support is assured if individual parents will insist upon the registration of each birth.

DEATHS BY COLOR IN THE REGISTRATION CITIES OF FLORIDA BY PRINCIPAL CAUSES OR GROUPS OF CAUSES FOR 1914 COMPARED WITH DEATHS BY COLOR FOR 1915. ALSO BIRTHS BY COLOR IN SAME CITIES FOR 1915 COMPARED WITH THOSE FOR 1914

	Jacksonville			Tampa			Pensacola			Key West			West Tampa			Gainesville			Miami			St. Augustine			Tallahassee		
	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T
Typhoid	9	5	14	10	2	12	4	3	7	4	5	9	3	0	3	0	2	2	5	2	7	1	1	2	0	1	1
Malaria	2	2	4	3	3	6	0	6	6	0	1	1	1	0	1	0	0	0	0	1	1	0	1	1	1	0	1
Measles	0	0	0	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scarlet Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Whooping Cough.....	4	2	6	1	1	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria and Croup.....	8	8	16	5	1	6	1	0	1	0	0	0	2	0	2	0	1	1	0	0	0	0	1	1	0	0	0
Influenza	9	6	15	4	3	7	2	1	3	0	0	0	1	0	1	3	0	3	2	0	2	0	0	0	1	0	1
Pulmonary Tuberculosis.....	32	126	158	34	45	79	13	38	51	23	13	36	12	1	13	2	7	9	9	13	22	8	6	14	1	1	2
Tuberculosis, other forms.....	3	3	6	7	5	12	0	0	0	1	1	2	1	0	1	0	0	0	1	1	2	0	0	0	0	0	0
Meningitis	4	0	4	8	0	8	1	0	1	2	2	4	1	0	1	0	2	2	1	2	3	2	0	2	0	0	0
Bronchitis	3	1	4	2	4	6	1	2	3	2	2	4	2	0	2	0	0	0	1	4	5	0	0	0	0	0	0
Pneumonia, all forms.....	28	52	80	29	11	40	9	13	22	12	6	18	6	0	6	5	4	9	1	10	11	2	0	2	4	1	5
Diarrhoea and Enteritis, under 2 yrs.	16	21	37	45	2	47	7	8	15	9	14	23	11	2	13	3	0	3	5	12	17	0	1	1	1	0	1
Violent, excluding suicide.....	51	64	115	23	13	36	13	14	27	8	1	9	3	2	5	2	1	3	11	18	29	4	7	11	4	2	6
Suicide	10	1	11	12	3	15	2	0	2	3	0	3	2	1	3	0	0	0	2	1	3	1	0	1	0	0	0
All other causes.....	351	533	884	306	156	462	121	156	277	129	47	176	41	14	55	27	45	72	76	65	141	43	29	72	18	30	48
Total Deaths 1915.....	530	824	1354	498	249	747	176	241	417	193	92	285	86	20	106	42	62	104	114	129	243	61	46	107	30	35	65
Total Deaths 1914.....	517	787	1304	522	293	815	186	247	433	241	100	341	109	27	136	32	60	92	46	41	*87	49	43	92	15	50	65
Total Births 1915.....	947	724	1671	1164	220	1384	357	188	545	343	106	449	301	29	330	86	42	128	210	135	345	74	32	106	52	31	83
Total Births 1914.....	1041	830	1871	1146	236	1382	381	213	594	394	129	523	341	28	369	76	48	124	98	48	146	65	14	79	46	68	114

* Miami. Only half year report for 1914

DEATHS BY COLOR IN THE REGISTRATION CITIES OF FLORIDA BY PRINCIPAL CAUSES OR GROUPS OF CAUSES FOR 1914 COMPARED WITH DEATHS BY COLOR FOR 1915. ALSO BIRTHS BY COLOR IN SAME CITIES FOR 1915 COMPARED WITH THOSE FOR 1914

	Lake City			St. Petersburg			Lakeland			Ocala			Orlando			Sanford			Live Oak			Quincy			Palatka			Daytona		
	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T
Typhoid	4	1	5	1	2	3	0	2	2	1	0	1	0	2	2	..	..	..	2	0	2	1	0	1	0	0	0
Malaria	1	0	1	1	3	4	1	2	3	1	3	4	0	0	0	..	..	..	0	2	2	0	1	1	0	0	0
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	..	..	..	0	0	0	0	0	0	0	0	0
Scarlet Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	..	..	..	0	0	0	0	0	0	0	0	0
Whooping Cough	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	..	..	..	0	0	0	0	0	0	0	0	0
Diphtheria and Croup	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	..	..	..	0	0	0	2	0	2	0	0	0
Influenza	3	0	3	4	0	4	0	0	0	2	0	2	0	0	0	..	..	..	0	0	0	0	0	0	0	0	0
Pulmonary Tuberculosis	8	6	14	6	5	11	0	12	12	9	8	17	1	3	4	..	..	..	0	4	4	1	9	10	2	2	4
Tuberculosis, other forms	0	0	0	0	1	1	0	1	1	0	1	1	1	0	1	..	..	..	0	0	0	0	0	0	0	0	0
Meningitis	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	..	..	..	0	0	0	1	0	1	0	0	0
Bronchitis	1	1	2	0	0	0	0	1	1	2	0	2	0	0	0	..	..	..	0	0	0	0	0	0	0	0	0
Pneumonia, all forms	5	2	7	5	1	6	1	0	1	9	4	13	0	1	1	..	..	..	0	0	0	2	2	4	3	0	3
Diarrhoea and Enteritis, u. 2 yr.	2	3	5	4	2	6	1	2	3	1	1	2	0	0	0	..	..	..	0	1	1	0	0	0	2	0	2
Violent, excluding suicide	5	5	10	1	0	1	3	8	11	5	1	6	3	2	5	..	..	..	0	1	1	2	4	6	0	0	0
Suicide	2	0	2	1	0	1	0	0	0	0	0	0	0	0	0	..	..	..	0	0	0	0	0	0	0	0	0
All other causes	83	17	100	55	13	68	28	47	75	67	32	99	16	6	22	..	..	..	10	5	15	28	28	56	18	11	29
Total Deaths 1915	114	36	150	79	27	106	34	75	109	97	51	148	21	14	35	..	..	..	12	13	25	37	44	81	25	13	38
Total Deaths 1914	9	0	9	104	46	150	62	19	81	25	42	67	101	41	142	15	20	35	..	..	..	14	17	31	31	36	67	25	19	44
Total Births 1915	92	44	136	78	18	96	52	29	81	77	23	100	34	68	102	..	..	..	33	2	35	51	40	91	35	29	64
Total Births 1914	5	1	6	98	57	155	106	21	127	47	31	78	72	30	102	39	61	100	..	..	..	26	5	31	5	23	28	32	26	58

DEATHS BY COLOR IN THE REGISTRATION CITIES OF FLORIDA BY PRINCIPAL CAUSES OR GROUPS OF CAUSES FOR 1914 COMPARED WITH DEATHS BY COLOR FOR 1915. ALSO BIRTHS BY COLOR IN SAME CITIES FOR 1915 COMPARED WITH THOSE FOR 1914

	Fernandina			DeLand			Plant City			Fort Myers			Apalachicola			Bartow			Tarpon Springs			DeFuniak Springs			Kissimmee			Marianna		
	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T	W	C	T
Typhoid	0	1	1	2	1	3	1	1	2	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2	1	0	1	0	0	0
Malaria	0	1	1	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	1	1	1	0	1	0	0	0	0	1	1
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scarlet Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Whooping Cough	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diphtheria and Croup	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	1	0	1	1	0	1	2	1	3	0	0	0	0	0	0
Influenza	0	0	0	0	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
Pulmonary Tuberculosis	0	5	5	1	3	4	2	6	8	2	1	3	2	5	7	1	0	1	1	4	5	1	0	1	0	2	2	1	5	6
Tuberculosis, other forms	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Meningitis	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Bronchitis	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pneumonia, all forms	1	1	2	0	0	0	2	1	3	2	0	2	1	0	1	0	0	0	0	1	1	1	0	1	0	0	0	0	1	1
Diarrhoea and Enteritis, u. 2 yr.	0	0	0	1	0	1	1	0	1	2	0	2	1	0	1	0	0	0	0	1	1	2	0	2	1	0	1	0	1	1
Violent, excluding suicide	2	5	7	0	2	2	4	2	6	1	1	2	1	4	5	2	1	3	5	1	6	1	0	1	1	0	1	1	0	1
Suicide	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
All other causes	10	25	35	19	11	30	15	13	28	22	14	36	7	35	42	9	4	13	9	8	17	10	10	20	13	4	17	5	8	13
Total Deaths 1915	13	39	52	24	18	42	25	23	48	34	20	54	15	44	59	15	5	20	17	16	33	20	11	31	17	6	23	7	16	23
Total Deaths 1914	14	64	78	22	13	35	32	21	53	12	4	16	21	34	55	17	8	25	28	8	36	19	15	34	11	4	15	14	17	31
Total Births 1915	8	42	50	45	12	57	54	11	65	56	12	68	47	35	82	51	19	70	42	9	51	22	11	33	51	3	54	32	4	36
Total Births 1914	14	58	72	43	10	53	59	29	88	49	6	55	43	37	80	53	14	67	26	6	32	16	7	23	56	18	74	31	11	42

TABLE No. 2

TOTAL BIRTHS IN THE TWENTY-NINE REGISTRATION CITIES BY COLOR FOR 1915 COMPARED WITH SIMILAR FIGURES FOR 1914

CITIES	1915			1914		
	White	Colored	Total	White	Colored	Total
Jacksonville	947	724	1671	1041	830	1871
Tampa	1164	220	1384	1146	236	1382
Pensacola	357	188	545	381	213	594
Key West	343	106	449	394	129	523
West Tampa	301	29	330	341	28	369
Gainesville	86	42	128	76	48	124
Miami	210	135	345	98	48	146
St. Augustine	74	32	106	65	14	79
Tallahassee	52	31	83	46	68	114
Lake City	..	..	..	5	1	6
St. Petersburg	92	44	136	98	57	155
Lakeland	78	18	96	106	21	127
Ocala	52	29	81	47	31	78
Orlando	77	33	100	72	30	102
Sanford	34	68	102	39	61	100
Live Oak	..	..	..	..	..	..
Quincy	33	2	35	26	5	31
Palatka	51	40	91	5	23	28
Daytona	35	29	64	32	26	58
Fernandina	8	42	50	14	58	72
DeLand	45	12	57	43	10	53
Plant City	54	11	65	59	29	88
Fort Myers	56	12	68	49	6	55
Apalachicola	47	35	82	43	37	80
Bartow	51	19	70	53	14	67
Tarpon Springs	42	9	51	26	6	32
DeFuniak Springs	22	11	33	16	7	23
Kissimmee	51	3	54	56	18	74
Marianna	32	4	36	31	11	42

TABLE No. 3

TOTAL DEATHS IN THE TWENTY-NINE REGISTRATION CITIES BY COLOR FOR 1915 COMPARED WITH SIMILAR FIGURES FOR 1914

CITIES	1915			1914		
	White	Colored	Total	White	Colored	Total
Jacksonville	530	824	1354	517	787	1304
Tampa	498	249	747	522	293	815
Pensacola	176	241	417	186	247	433
Key West	193	92	285	241	100	341
West Tampa	86	20	106	109	27	136
Gainesville	42	62	104	32	60	92
Miami	114	129	243	46	41	87
St. Augustine	61	46	107	49	43	92
Tallahassee	30	35	65	15	50	65
Lake City	..	..	..	9	0	9
St. Petersburg	114	36	150	104	46	150
Lakeland	79	27	106	62	19	81
Ocala	34	75	109	25	42	67
Orlando	97	51	148	101	41	142
Sanford	21	14	35	15	20	35
Live Oak	..	..	..	..	..	..
Quincy	12	13	25	14	17	31
Palatka	37	44	81	31	36	67
Daytona	25	13	38	25	19	44
Fernandina	13	39	52	14	64	78
DeLand	24	18	42	22	13	35
Plant City	25	23	48	32	21	53
Fort Myers	34	20	54	12	4	16
Apalachicola	15	44	59	21	34	55
Bartow	15	5	20	17	8	25
Tarpon Springs	17	16	33	28	8	36
DeFuniak Springs	20	11	31	19	15	34
Kissimmee	17	6	23	11	4	15
Marianna	7	16	23	14	17	31

TABLE No. 4

CERTIFICATES BY COLOR RECEIVED FROM THOSE MUNICIPALITIES HAVING
LESS THAN 2000 POPULATION ACCORDING TO 1910 FEDERAL CENSUS

CITIES	BIRTHS			DEATHS		
	White	Colored	Total	White	Colored	Total
Apopka ²	3	1	4	4	1	5
Auburndale	11	3	14	4	1	5
Avon Park	6	0	6	9	1	10
Bellevue ⁴	1	0	1	1	0	1
Bradentown ⁸	35	5	40	15	3	18
Branford ⁴	8	0	8	0	0	0
Bushnell ³	13	1	14	9	0	9
Callahan	9	1	10	9	2	11
Carrabelle ⁶	13	4	17	2	4	6
Caryville ⁴	4	0	4	4	0	4
Center Hill ²	9	5	14	6	0	6
Chipley ⁴	13	0	13	1	0	1
Citra	5	0	5	5	0	5
Clearwater ⁴	19	0	19	7	1	8
Coleman ⁴	4	4	8	6	2	8
Cottondale ⁴	4	1	5	1	1	2
Crescent City	11	4	15	9	4	13
Cypress	No reports			No reports		
Dade City ¹¹	2	0	2	5	8	13
Dania ²	4	0	4	2	6	8
Daytona Beach ²	3	0	3	3	0	3
Delray ³	19	9	28	4	3	7
Dunedin	5	0	5	2	2	4
East Millville ⁶	19	1	20	16	3	19
Eatonville ⁴	0	1	1	0	1	1
Eau Gallie ³	3	0	3	2	1	3
Estero ³	0	0	0	1	0	1
Eustis	10	5	15	12	8	20
Fargo ⁴	1	2	3	0	0	0
Fellsmere ⁶	15	0	15	4	2	6
Florida City ⁴	13	1	14	0	0	0
Ft. Lauderdale	42	15	57	8	9	17
Ft. Meade	40	8	48	14	10	24
Ft. Pierce	24	12	36	17	12	29
Glendale ⁴	12	0	12	0	0	0
Greensboro ²	19	0	19	2	0	2
Gulfport	Recently passed ordinance			No reports as yet		
Hosford ¹²	11	0	11	3	1	4
Interlachen ⁶	0	0	0	0	2	2
Jasper ⁴	18	3	21	5	3	8
Lake Butler	20	0	20	5	0	5
Lake Helen	7	13	20	5	3	8
Lake Worth	24	0	24	8	1	9
Largo ²	11	0	11	2	0	2
Laurel Hill ³	2	0	2	2	0	2
Lawtey	41	25	66	15	8	23
Leesburg ²	4	0	4	5	1	6
Lynn Haven	14	1	15	20	0	20
Maccleenny ⁴	1	0	1	0	0	0
Manatee ²	4	3	7	4	4	8
Melbourne ¹⁰	6	2	8	1	0	1
Milton ²	23	0	23	9	5	14
Molino ⁴	9	1	10	3	2	5
Mt. Dora	8	6	14	15	4	19
Mulberry	Recently passed ordinance			No reports as yet		
Newberry	7	2	9	0	3	3
Noma	19	0	19	1	0	1
Okeechobee ⁴	19	1	20	6	0	6
Orange Park	Recently passed ordinance			No reports as yet		
Ormond ²	10	3	13	0	8	8
Pablo Beach	1	0	1	3	1	4
Palmetto	Recently passed ordinance			No reports as yet		
Panama City	19	1	20	9	5	14
Pinellas Park ²	3	0	3	1	0	1
Pompano ⁴	2	1	3	0	0	0
Ponce de Leon ⁶	2	0	2	1	0	1
Port Tampa City	23	9	32	1	7	8
Punta Gorda ²	No reports			No reports		
Reddick ⁴	1	0	1	0	1	1
St. Andrews	28	3	31	8	1	9
St. Cloud	27	1	28	49	0	49
Sarasota	60	14	74	13	9	22
Sebring	8	3	11	4	1	5
Sopchoppy	Ordinance passed but no reports have been received					
South Jacksonville	35	2	37	28	16	44
Starke ¹⁰	25	2	27	11	6	17

TABLE No. 4—Continued

**CERTIFICATES BY COLOR RECEIVED FROM THOSE MUNICIPALITIES HAVING
LESS THAN 2000 POPULATION ACCORDING TO 1910 FEDERAL CENSUS**

CITIES	BIRTHS			DEATHS		
	White	Colored	Total	White	Colored	Total
Stuart	13	0	13	5	0	5
Taft ⁶	16	29	45	12	8	20
Tavares ⁷	3	3	6	5	1	6
Titusville ¹⁸	1	0	1	5	2	7
Umatilla ⁸	2	1	3	3	0	3
Wauchula ⁹	30	0	30	6	0	6
Wellborn ⁹	1	0	1	3	0	3
West Palm Beach	42	13	55	21	7	28
Williston	Ordinance passed but no reports have been received					
Winter Haven ⁸	17	0	17	5	0	5
Winter Park ⁹	3	1	4	1	0	1
Zephyrhills ⁴	3	0	3	7	0	7
Zolfo ⁵	4	3	7	4	1	5

INDEX FIGURES INDICATE LENGTH OF TIME REPORTS HAVE BEEN
RECEIVED, AS FOLLOWS:

- ⁰ December reports only
- ¹ November-December
- ² October-December
- ³ September-December
- ⁴ August-December
- ⁵ July-December
- ⁶ June-December

- ⁷ May-December
- ⁸ April-December
- ⁹ March-December
- ¹⁰ February-December
- ¹¹ January, February and March only
- ¹² July to October
- ¹³ July to September

TABLE No. 5

**PROPORTION OF DEATHS FROM PRINCIPAL CAUSES OR GROUPS OF CAUSES
PER 1000 TOTAL DEATHS, BY COLOR, FOR THE REGISTRATION CITIES
OF FLORIDA, AND COMBINED CITY (JACKSONVILLE, TAMPA, PEN-
SACOLA AND KEY WEST) FOR THE YEAR 1915, COMPARED
WITH SIMILAR PROPORTIONS OF DEATHS IN THE
REGISTRATION AREA OF THE UNITED STATES
FOR 1913**

CAUSE OF DEATH	Registration Cities of Florida		Combined City (Jacksonville, Tampa, Pensacola, Key West)		Registration Area of United States	
	White	Colored	White	Colored	White	Colored
Typhoid	22.3	14.3	19.3	10.7	12.3	17.7
Malaria	5.6	13.4	3.6	8.5	1.3	7.4
Measles	3.9	0.0	6.5	0.0	9.4	5.3
Scarlet Fever	0.0	0.0	0.0	0.0	6.6	.2
Whooping Cough	3.4	2.3	5.0	2.1	6.9	10.1
Diphtheria and Croup	10.3	6.0	10.0	6.4	14.1	5.0
Influenza	14.1	5.1	10.7	7.1	8.7	8.6
Pulmonary Tuberculosis	73.6	152.1	73.0	158.1	84.8	159.9
Other Forms Tuberculosis	6.8	6.0	7.9	6.4	13.7	19.2
Meningitis	9.8	3.7	10.7	1.4	7.4	7.9
Bronchitis	6.0	7.4	5.7	6.4	12.9	12.9
Pneumonia	54.8	51.1	55.9	58.3	93.6	99.9
Diarrhoea and Enteritis, under 2 yrs.	49.2	32.7	55.1	32.0	54.5	41.8
Violent, excluding Suicide	66.8	73.3	68.0	65.4	65.7	66.8
Suicide	15.8	2.8	19.3	2.8	11.9	3.9
Other Causes	657.6	629.8	649.3	634.4	596.2	533.4

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This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Publication 89, Hog Cholera, January, 1912, pp. 12.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
- Publication 102, Typhoid Fever in Tampa, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 24.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 121, Vital Statistics, All Florida Municipalities can have Vital Statistics, Leaflet, Reprint from Florida Health Notes, August, 1914.
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 137, Report of Surgeon in Charge of Work under the "Crippled Children" Act, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 8, illustrated.
- Publication 138, Annual Report of Veterinary Department of the State Board of Health of Florida, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 57.
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.

THE OTHER DRUG HABIT

By Senior Surgeon CHARLES E. BANKS, U. S. Public Health Service

The lately enacted and now well advertised Federal anti-narcotic law emphasizes the existence of a fairly large class of people who have sought to augment their own inherent shortcomings by employing the artificial aid of "dope" to intensify their natural leanings towards mental and physical inertia.

But there is another and infinitely larger class of drug devotees to whom no law can be framed to apply. Only an appeal to their little remaining sense of the obvious can draw them back to a safe and sane course of living. This other class of drug habitues is the Patent Medicine "Fan," the people whose confidence in anything sold in a bottle that hollers "cure" loud enough has been capitalized by the proprietary drug industries with everlasting profit. The ordinary American of the species over eats, under exercises, over works and under sleeps and is led to believe by labels and window displays that he can find ready-made health at a dollar a bottle, or six of them for five dollars—that a panacea for his physical sins comes in the form of pills and potions. Marvellous idea—getting health by the teaspoonful at a penny the dose!

The average patent medicine "fan" probably starts out on his career because he went to his physician, and after an examination was told that he did not need any medicine, but did need some more exercise, more sleep, less gluttony, less dissipation. He concludes that the doctor is "no good" because he did not supplement this advice with a prescription for a half pint of medicine as a visible return for his consultation fee. This faith in medicine—any old medicine—is child-like and ingrained, a survival of the beliefs in the medicine men and incanters of the stone age. The "fan" must be taking something for every little flicker of a pain here or there, a plan infinitely easier than regulating his habits of eating, drinking, prowling, loafing. If he has a "lame" back which ensues from the accumulation of uric acid in the system due to sedentary life, which a little physical exercise would remedy, he flocks in droves to the drug shop and gulps down "kidney cures;" if his stomach gets "weak" from over-stoking and machine loading up goes his dollar and down goes a "dyspepsia cure" and so on through all the merry chase led by the proprietary medicine barkers. There isn't one of them who will tell him to find health by a reform of his habits of unhygienic living. They appeal to his ancestral beliefs that he can pick health out of a pill box. A lame back does not mean kidney disease any more than a lame toe means ptomaine poisoning. The commonest seat of simple muscular pains (the back) is used in the jargon of patent-medicine advertisements to scare every "fan" into a state of blue funk about his kidneys and in the language of the street "every sucker falls for it." One of the commonest tales told to physicians by patients when they come for treatment is that their kidneys are out of order. Why? Because they have a weak or lame back. This weak and lame back is the sheet anchor of the millionaire medicine men. And so each new nostrum conspicuously advertises an array of ordinary symptoms and sensations as of the gravest

import and thus provides the "fan" with a fresh opportunity to drink up another draft of drugs in the vain conceit that he has diagnosed his supposed troubles and found an infallible remedy for them. The patent medicine habit is on all fours with the get-rich-quick schemes, and all other human schemes of violating the laws of trade or health. The remedy for this other drug habit is to get out of the notion that mere medicine is a "cure" for bodily ills. It isn't. It only helps to correct certain conditions that must ultimately depend for their permanence by getting ones self into fighting trim and keeping so by decent and sensible living. Every one who tries to be his own medical adviser has a fool for a patient.

Health cannot be bought in corked bottles.

TREATING THE COMMON COLD WITH VACCINE

During recent years the "common cold" has been the subject of much study and investigation, as a result of which many of the old time-honored theories have been exploded and it has been shown that this is clearly a communicable disease—that it is transmitted from one person to another just as are diphtheria, tuberculosis, measles and others of the so-called "contagious" diseases. Exposure to cold, sudden changes of temperature and other like conditions to which "colds" were formerly attributed do play a part, but only a minor part, in the causation of these disorders, by lessening the power of resistance to those organisms, or germs, which are directly responsible for the development of colds or influenzal attacks. The primary cause is the germ; exposure is only a predisposing or contributing factor.

As a result of the educational activities of health departments and of the publicity given such matters through the press, these facts have come to be very generally known and accepted, and the widespread epidemic of influenza which prevailed throughout the country during the past fall and winter resulted in an even more active campaign for the instruction of the public along these lines. Newspaper articles called attention to the dangers of careless coughing and sneezing, special bulletins were issued, and posters displayed. The New York Association for Improving the Condition of the Poor instituted a "Watch Your Sneeze Campaign" and published a number of excellent posters bearing such striking warnings as "Protect the Public From Disease: Use Your Handkerchief When You Sneeze." In a word, every possible educational medium was employed to familiarize the public with the modes of spread and the methods of prevention of these disorders.

The advance in the treatment of colds has kept pace with the progress along other lines. The demonstration of the bacterial origin of these affections opened the way for the production of bacterins, or vaccines, which are of value both in the treatment and the prevention of the common varieties of tonsillitis, rhinitis, pharyngitis, la grippe, etc., which are included in the popular general term, "colds." The following discussion of the use of these vaccines is from the press of the National Vaccine and Antitoxin Institute, and is here reprinted by

permission of that firm. It contains much of interest to those who are so unfortunate as to be the victims of these troublesome attacks.

Bacterial Vaccines have no larger field of usefulness than in the treatment of influenzal attacks and their sequelae.

No case is more refractory than the generally debilitated patient who is always "taking cold."

Heretofore, you have had at your disposal only the old means of strengthening the system. Indirectly you have attempted to build up immunity by tonic measures.

Today there is placed in your hands a more definite, a more rapid and more permanent agent—bacterial vaccines.

Much work has been done on the bacteriology of the common cold. It is known that undue exposure brings on an influenzal attack. But without the presence of one of the group of catarrhal organisms no amount of exposure can possibly produce influenzal attacks. It has been demonstrated that severe exposure to cold results in a definite fall of the opsonic index—that is, the power of the blood to destroy invading bacteria. So it is that following a definite exposure to chill the opsonic index of the patient falls and the ever present catarrhal organism embraces this opportunity, the period of lowered immunity, to set up an acute infection.

How this infection spreads, how it reaches a subacute and finally a chronic stage, and localizes in some sinus of the ear, nose or throat to become a cause of irritation to the patient and the physician for months to come and how just when the condition seems well in hand a fresh attack places the case back at the starting point with all the gained ground lost, is a familiar train of symptoms.

PERMANENT IMMUNITY

Why, it may be asked, if these influenzal attacks are bacterial, does the patient not gain a natural immunity, having suffered an attack?

To this question we can say the patient does attain relative immunity. But this immunity is specific for the particular organism in the group responsible for the prevailing influenzal epidemic.

Today your community may be suffering from a streptococcic tonsillitis. Patients contracting this infection will remain for a number of months, possibly for several years, free from that particular form of tonsillitis. But the next epidemic of common colds may take the form of a pneumococcic tonsillitis and to this infection your patients may fall ready victims.

A DEFENSE OF MIXED VACCINES

The scientific propagandist has appeared of late in the press decrying, "Mixed Stock Vaccines."

That some of the mixed stock vaccines on the market are absurdities—one cannot but admit. That the use of a highly mixed vaccine may, in some instances, encourage careless diagnosis is likewise true. But in attempting to immunize susceptible individuals against the frequent epidemics of the common cold, any attempt to use other than a highly mixed vaccine, that is, a stock vaccine containing all the commonly

encountered organisms of the catarrhal or influenzal group, is bound to meet with failure and any attempt to specifically treat a single chronic infection of the ear, nose or throat without making an attempt to at the same time guard against future acute infections likewise seems foolish practice.

With these facts in mind and with the help of some of the best ear, nose and throat men in the country we have produced our MIXED VACCINE (Ear, Nose and Throat).

The results which have been obtained with this vaccine in increasing in susceptible persons their resistance to the common cold, and in clearing up chronic catarrhal conditions of the ear, nose and throat, have been in many instances remarkable.

This vaccine is not offered as a substitute for autogenous or personal vaccines where their use is practicable; it is not offered as a substitute for the older means of treatment now at hand; but it is suggested as an addition, and a very decided addition, to the armamentarium heretofore at hand in meeting these conditions.

You will be surprised to find a goodly number of patients whose catarrhal infections will clear up under this course of treatment and who will pass their entire winter without contracting a single cold.

TUBERCULOUS DAIRY CATTLE A MENACE TO PUBLIC HEALTH

The following address, by Dr. E. G. Birge, Assistant Bacteriologist in the Tampa laboratory of the State Board of Health, which was recently delivered before the dairymen of Tampa, at the request of Mr. R. I. Gordon, Chief of the Pure Food Department of that city, summarizes briefly and clearly the facts concerning bovine tuberculosis and its relation to the causation and spread of the human type of this disease.

Gentlemen:

When I was asked to talk to you about tuberculosis in cattle, there was a question in my mind whether to talk on strictly the dairymen's side of the question, that is, the economic point of view, or to take the side in which I am particularly interested, that is, the relation of bovine tuberculosis to public health. Inasmuch as there will be other speakers today that will take up the question from the economic point of view, I wish to confine myself to the public health side of the matter.

There has been a controversy concerning the danger of tubercular cattle to public health. It has been stated that all human tuberculosis comes from bovine origin. In 1901 Robert Koch stated that in his opinion human tuberculosis and bovine tuberculosis were separate diseases, and that human beings were not infected by the bovine type of the tubercle bacillus. That statement started an enormous amount of investigative work, and in 1908 the International Congress on Tuberculosis at Washington, expressed the opinion that bovine tuberculosis was a great and real menace to the public health. This opinion was based on seven years' study by the best workers all over the world, and was

unanimous. At the present time it is estimated that in the United States there are one million cases of tuberculosis. About seventy thousand of those cases occur in children under five years of age. Of these seventy thousand, approximately thirty-five thousand are probably due to infection from cattle. These cases can be absolutely prevented by taking proper measures. I lay stress on the infection in children inasmuch as milk forms the largest part of the child's diet, and at this period the human being is more susceptible to infection than at any later period. It must not be thought, however, that the infection confines itself entirely to children, for in our statistics, we frequently find cases of bovine tuberculosis among adults.

I wish to impress upon you these facts that I have just stated so that you will realize that our campaign against tuberculosis in cattle is not only for your benefit from the economic standpoint, but for the general benefit of humanity. Now, let us turn to the disease in cattle, and trace out the sources of infection; and I hope that I will make it plain to you that an infected cow in a dairy will sooner or later infect all the other cows; and that every cow with pulmonary tuberculosis, a large number with glandular tuberculosis, and also every cow with tubercular mastitis, produces milk infected with the tubercle bacillus.

In pulmonary tuberculosis, the cow does not cough up and expectorate the material from the lungs as the human being does, but the material coughed up from the lungs is swallowed and passes from the cow through the intestinal tract, so that the feces of tubercular cows contain the bacilli.

Healthy cattle grazing with tubercular cattle undoubtedly become infected from fodder over which a greater or less amount of fecal material is spread.

During the process of coughing there is a fine spray which emanates from the mouth and carries with it the tubercle bacilli, so that a cow infects her surroundings on which this spray alights, and it can be said that in the stables a cow with pulmonary tuberculosis almost always infects the stall and feed boxes in her immediate vicinity. These tubercle bacilli so spread on the surrounding objects are one source of infection.

Fecal material from the flanks of the cow drops into the milk at milking time as particles of dust, and the milk will be infected with tubercle bacilli. In cases of generalized tuberculosis, glandular tuberculosis, and tubercular mastitis, the bacilli may be in the milk duct, either directly as in the case of tubercular mastitis, or may be carried to the milk ducts through the lymph and blood channels, and thence to the milk. Tubercle bacilli do not multiply in the milk, but retain their vitality through a long period of time, and when swallowed by a human being under proper conditions can set up tuberculosis in the human subject.

Milk is not the only dangerous dairy product, for tubercle bacilli have been isolated from butter, ice cream and cheese made from tubercular infected milk, so that all dairy products from infected cattle are a menace to those using them.

Now, I wish to take up briefly the means of eradicating the disease

among the dairy herds themselves, and the prevention of infection in the human being through dairy products. I can summarize these briefly as follows:

First: The eradication of tuberculosis among the dairy cattle. A dairy for economic reasons should never purchase a cow from a herd that is not tested. It is also unwise to purchase a cow from a herd not tested previous to the purchase, and the cow should not be allowed to mingle with healthy cows before being thoroughly tested for tuberculosis. A tubercular cow, when once found in a herd, should be isolated and should, if possible, be eradicated from that herd at once. It is poor policy to keep a diseased animal, from an economic standpoint, in a herd; and I think that a dairyman who keeps a record of the cost of upkeep and the returns of a cow, will find that the cost of upkeep is larger than the returns of that individual. Absolute cleanliness in the stable, care and cleanliness in the disposal of manure, keeping the cows clean are also essential points in the prevention of the spread of the infection.

Now, for the prevention of the production of tubercular milk:

First, sterilization and strict cleanliness of all utensils that receive milk is essential. It is unnecessary to say that only utensils of an approved type should be used.

Second, Efficient pasteurization of raw milk will tend to lessen the danger of infection, but I wish to emphasize the word "efficient."

What I have said up to this point is merely a rough outline of the procedures which public health officials desire dairymen to follow, and which we also wish to have the public recognize, as being necessary to a safe milk supply, not only concerning tuberculosis, but other diseases which may be transmitted through the milk.

SAME DAY, SAME FAMILY, SAME DISEASE

"Sister and Brother Die on Same Day of Same Disease" is the telling headline of a pathetic story in a Racine (Wisconsin) paper. The disease was tuberculosis. The fact that the deaths of both occurred on the same day was probably a coincidence, but it was not a coincidence that they died of tuberculosis. Conditions in the home, in which they were infected in childhood, were undoubtedly directly responsible.

In the same way the conditions in many homes today will be the direct cause of deaths in another decade. Society of today will be accountable. The responsibility of society is the responsibility of its individual members. What part of it is your responsibility?—"The Crusader," Wisconsin Anti-Tuberculosis Association.

THE CHILDREN'S BUREAU AND BABY WEEK

JULIA C. LATHROP, Chief, Children's Bureau, U. S. Dept. of Labor

"Is Baby Week the business of a Government Bureau?" The observing taxpayer is perhaps asking this question.

Ever since last October when the General Federation of Women's Clubs announced its plan, an increasing proportion of the Bureau's office force has been detailed to the correspondence required by the growing interest in the nation-wide observance of Baby Week.

The sociologist and the statistician will remind us that the Bureau was created to make investigations pertaining to the welfare of children and that Baby Week is not an investigation and is not statistics.

To all these groups we are accountable. What is our reply?

For the three years the Bureau has been in existence it has put a considerable share of its energy into a statistical study of the social and economic causes of infant mortality, planned with the greatest care and conducted by trained field agents with all possible precision. The results of this inquiry are being published, as the law requires, in a series of reports which consist of statistical tabulations accompanied by descriptive text.

There are many million fathers and mothers in the United States, including many of the best educated fathers and mothers, who have never read a statistical table and never will. Yet hidden within the figures of the Bureau's reports on infant mortality, the reading of which they will successfully evade, lie stern facts about the dangers which beset American babies.

These figures give a clue to the reasons why, on the great average, one baby in eight dies before the end of the first year of life. They show that this average obscures a wide gamut with comparative immunity from infant loss at one end and with fearful infant waste at the other.

If the Bureau is to investigate and to report as the law directs, then it must try to find ways of reporting which will be heard by the whole public which it was created to serve.

The popular methods of the Baby Week, which are those of all astute advertisers, form an invaluable method of reporting to the parents of this nation those standards of infant welfare which experts are endeavoring to make clear.

The Baby Week emphasizes the constructive side of infant care. It addresses not only individual parents but communities.

The best test of its value will be the work that follows it:

Undoubtedly every State Board of Health should secure what only six States have at present—a special division of child hygiene. No city or town should fail to provide instructive nursing service and to pay constant heed to the problems of hygiene and sanitation, of proper housing and of recreation spaces, since all these immediately affect the welfare of infants.

There are 3,009 counties in the United States. In every county seat there should be a center for the health work of that county—a station for examining babies, and older children, and for furnishing expert advice for keeping them well—in short, a health teaching center.

We must have complete birth registration.

All these will be institutions for the common use—no more revolutionary, no more eleemosynary, than public schools and weather bureaus and agricultural experiment stations.

The New Zealand infant mortality rate is less than one-half of ours and is being further reduced.

Why take less pains for American babies than New Zealand takes?

TREATMENT FOR BURNS

The best advice about burns is to prevent them. They are the most painful of common injuries, slow to heal and often result in life-long disability or severe disfigurement. Fortunately, they are at the time of the accident, free from infection, and if kept clean, will not result in blood poisoning.

The best thing to do in case of a simple burn of the skin is to treat it with a coat of vaseline, lard or other greasy substance to exclude the air. A paste of soda and water, or flour and water, will exclude the air and may be used with good results. The same treatment may be used in case there is a blister, but if the burn is deep and the flesh is destroyed, a physician should give the treatment. The after-treatment of burns consists mainly in keeping the injury clean and free from infection.

Some of the most serious burns have resulted from accidents that could have been avoided. Mothers too frequently leave their little ones in a room where there is an open fire or a stove with a fire in it. A fender or a wire screen before an open fire removes this danger. Perhaps the most serious burns are those resulting from the use of oil in starting a fire, especially a smoldering fire. A little forethought seems all that is necessary to avoid what is often a fatal result. Children frequently burn their hands and ignite their clothing by playing with matches. Matches are dangerous playthings for the poison that they usually contain besides their danger of igniting, and should be kept out of children's reach.—*Press Service, North Carolina State Board of Health.*

Health Briefs

Open air is the best spring tonic.

The careless sneezer is the great grip spreader.

Fingers, flies and food spread typhoid fever.

House screening is a good disease preventive.

Pellagra may be prevented or cured by proper diet.

Children from sanitary homes advance more rapidly in school than those from dirty premises.

The United States Public Health Service believes that the common towel spreads trachoma, a disease of the eyes.

The United States Public Health Service, in its operations against plague in New Orleans, has trapped 615,744 rodents in the past 18 months.

There has not been a single case of yellow fever in the United States since 1905.

Yellow fever has been conquered through the knowledge that it is transmitted by mosquitoes. Malaria is also transmitted by mosquitoes, and can be avoided by screening.

One person out of every four in America who die between the ages of fifteen and fifty dies from tuberculosis. It is a chief cause of poverty. But it is preventable and conquerable.

Dirty grocers, butchers, bakers and fruit sellers, who violate the law and allow flies to swarm on the food which they have for sale, can not meet the competition of wide-awake, up-to-date dealers who recognize that sanitation is necessary to meet the demands of an enlightened public.

Who would have thought that the tin can is a menace to the public health? The expert malaria investigators of the U. S. Public Health service have found, however, that discarded tin cans containing rain water are breeding places for the mosquito which is the sole agent in spreading malaria. A hole in the bottom of the empty can might have resulted in the saving of a human life. Certainly it would have assisted in preventing a debilitating illness. Empty tin cans have no business about the premises, anyway, but if we must so decorate our back yards, let's see to it that the can has a hole in the bottom.

Correspondence

ENFORCING THE SCREENING LAW

Dr. J. Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Sir: Under Chapter 6953, Laws of Florida, 1915, I, as Sheriff, have required all grocery stores to screen their fruit, including oranges, apples and bananas, which they offer for sale. I am meeting with a great deal of opposition to this law from the best merchants of this town, and am continually confronted by them with the fact that they do not have to screen the fruit in other places. I, myself, have noticed that the fruit stands in some cities are not screened, and think possibly I may have misconstrued this law, and that it may not include the fruits mentioned.

Knowing that you were instrumental in getting this law passed, I will thank you very much if you will give me your opinion in regard to the enforcement of the same.

It is not my desire to cause the citizens of this county any unnecessary inconvenience and if I am wrong in my construction of this law I would like to know it.

Thanking you for an early reply, I beg to remain,
Yours very truly,

Jacksonville, Fla., Jan. 1, 1916.

Dear Sir: Receipt of your letter of the 30th ult. is acknowledged, and I wish to thank you for your commendable stand in regard to the enforcement of the screening law. In reply to your inquiry, you are informed that you are entirely correct in your construction of the law for the screening of fruit stands, grocery stores, etc. As you are aware, the State Board of Health is an advisory body and has no police or judicial powers. Upon receipt of reports that any of the Public Health laws are being violated, this office notifies the person or persons violating the law, to comply with its provisions, and if this is not done, the sheriff and prosecuting authorities of the county are notified to enforce the law.

All laws, of course, in order to be effective, must have the support of public opinion; and if the merchants who complain at having to screen their groceries, fruit, or meat, as the case may be, could realize the bad impression created in the public mind as to the cleanliness of their goods and their way of doing business, they would have no hesitancy in screening their place of business from the standpoint of a good investment.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

CONCLUSIVE PROOF OF TUBERCULOSIS

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: What are the conclusive proofs of tuberculosis where there is no cough? How should an expectoration specimen be sent and would it give proof? As we are a long way from a doctor, any information will be appreciated.

Yours very truly,

Jacksonville, Fla., Jan. 24, 1916.

My Dear Sir: In reply to your letter of the 21st inst., I am mailing you under separate cover State Board of Health bulletin on Tuberculosis,

in which you will find full information concerning the cause, transmission, symptoms and treatment of this disease.

I am also mailing you a container in which you may collect a specimen of sputum and mail it to the State Board of Health Laboratory for examination. Full directions for collection of the specimen will be found upon the reverse side of the data blank which will accompany the container.

It should be remembered that a positive report upon such an examination is absolutely positive evidence that the disease exists; but in the early stages it is often impossible to find the germs of the disease in the sputum even though they are present in the lung. Hence a negative report should not be accepted as conclusive proof that the disease does not exist. In the early stages of the disease more definite information can often be obtained by a thorough physical examination, and I would accordingly advise that in addition to the laboratory analysis you consult your family physician or some other competent medical practitioner for such an examination.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

FREE TREATMENT FOR HOOKWORM DISEASE

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: I gave one of the posters that you sent me to the principal teacher in our public school. He wanted to post it at the school house. I will post the other two in conspicuous places and distribute the Hookworm leaflets.

Please send me one of the mailing cases. Could not the hookworm remedy be sent with instructions for use so as to be used without the assistance of a physician?

Yours very truly,

Jacksonville, Fla., Feb. 16, 1916.

Dear Sir: In response to your letter of February 9th, I am sending you today, a container, in which you may mail to the laboratory of the State Board of Health, a specimen for examination for hookworm disease.

With regard to treatment of this disease, I will say that for a number of years, this treatment was distributed free of charge, by the State Board of Health, but this plan was discontinued, some two years ago, because of the fact that in the great majority of cases, no improvement in sanitary conditions was made about the rural home and school, and about ninety per cent of all cases treated became reinfected within a short time afterwards. This Board is at present willing and anxious to furnish free treatment for every member of your family found infected, and to continue the treatment until they are entirely cured, providing that you will assist in making this treatment of permanent benefit, by installing, at your home, a sanitary privy, of a type approved by the State Board of Health. In this manner reinfection will be prevented and some lasting good will be derived from the treatment of this disease.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

STATE LAW RELATIVE TO SCREENING SHOULD BE RIGIDLY ENFORCED

The State Board of Health, in a recent bulletin, calls attention to the law enacted at the last session of the legislature, providing that it shall be a misdemeanor to operate a hotel, boarding house, restaurant or lunch counter, without screening every door, window and other opening in the dining room, kitchen or passage leading to them with wire netting of a mesh small enough to prevent the admission of flies.

The law further makes it a misdemeanor to sell or expose for sale food in any meat or butcher shop, grocery, fruit stand, bakery or other place, which is to be eaten raw or which is to be consumed without cooking, and to operate any dining or buffet car within the state without screening such eating places with wire netting which will prevent the admission of flies, the penalty being upon conviction a fine not to exceed fifty dollars, or imprisonment not longer than three months for each proven violation.

The State Board calls attention to the fact that this law, while it possibly might have been better, is a vast improvement on any previous attempt to protect the people of the state through these channels from the infection of typhoid fever and some other filth disease if—note the if—the law is enforced.

This disease is carried to the new victim by flies, which flounder in the excreta of the patient and deposit the germs of typhoid in or on the food which is eaten by healthy persons, who thereby are doomed to suffering with pretty strong chances of death. Disgusting, isn't it? Yet it is the purpose of this Chapter 6953 to aid in stopping this cycle of disease, and the Board of Health is asking the people of Florida to insist on its enforcement for their own preservation.

Regulations on the statute books of Florida for the preservation of health are just as really laws as those that provide for the punishment of the murderer. The private citizen has the inalienable right to demand of the proper authorities the enforcement of any law, and the official who deliberately or carelessly neglects to perform his duty may be removed from office.—Pensacola Journal.

TAMPA'S PURE MILK SUPPLY

Just a few years ago Tampan's had little protection from dairymen who sold milk from diseased cows and unsanitary dairies, and many deaths and much illness undoubtedly resulted from the use of impure dairy products of all kinds.

During the present administration, however, that condition has been changed and the people of no city in the country receive better protection in this respect. The fight to enforce the pure food laws has been a hard one, but it has been successful, and much credit is due to Richard I. Gordon, head of the municipal pure food department. Mr. Gordon has not only conducted his department to excellent advantage, but has done a great deal in an educational way in behalf of the people of the city and section. The effectiveness of his work is shown by the report of L. B. Cook of the dairy division of the bureau of animal industry of the national department of agriculture, made last week. The success of Mr. Gordon, backed by the entire city administration, is undoubtedly pleasing to the people of Tampa, and particularly those who are interested in preserving the public health.—Tampa Times.

TRAP THE HOUSE FLY

A maggot trap which will practically prevent the breeding of the house fly is described in a new bulletin of the department, No. 200, "A Maggot Trap in Practical Use; An Experiment in House Fly Control." The investigators who carried on this experiment at the Maryland Agricultural College declare that during August and September at least 98 per cent. of the larvae breeding in the manure were destroyed, and although the trap was not so efficient when the weather became colder, even then it greatly reduced the number of flies.

The principle of the trap is simple, it is easy to construct, and the expense is said to be probably less in the long run than the investment which many farmers now make in screens for their dwellings and sprays and fly nets for their live stock. In its roughest outlines the trap consists of a concrete basin with a latticed wooden platform erected upon it to hold the manure. The basin is connected by a drainage pipe with a small concrete cistern. The bottom of the basin is filled with water into which the maggots breeding in the manure drop, as they are about to turn in the pupa or chrysalis stage, and are drowned. At frequent intervals the water is run off into the cistern and is then pumped back on the manure pile. In this way all the liquid manure is saved.

The successful operation of this trap rests upon several facts connected with the habits of the house fly which have been thoroughly established by observation. The adult fly lays its eggs in fresh manure. There they remain until the larva stage is almost over and the insects are about to enter the pupa or chrysalis stage. At this time a pronounced tendency to migrate is evident. In consequence, if the manure is placed upon a platform with a latticework bottom the larvae, while migrating, will fall through these openings into the water in the basin below. In the case of the experiments at the Maryland Agricultural College a careful count showed that between July 25 and October 1, about 112,000 larvae were killed in this way. This, however, does not include the number that were picked up from the basin by sparrows or poultry. Altogether it is estimated that during the warm weather the efficiency of the trap was probably 99 per cent. Later, when the temperature was lower, the trap's success was not so marked. This was accounted for by the fact that when the air is much colder than the manure heap the larvae will not attempt to leave the heap and therefore will not fall into the basin.

Another difficulty experienced arose from mosquitoes using the water in the basin and the cistern to breed in. This was overcome by cleaning out the basin at regular intervals and by sprinkling a little oil over the surface of the water in the cistern.

Properly constructed, such a trap offers no obstacles to the convenient and economical handling of manure. It is essential, however, that each day's addition to the heap should be sprinkled with sufficient water to keep the manure moist but not enough to cause leaching. The details of the construction of the trap are contained in the bulletin already mentioned. This particular trap was designed to hold the manure produced by three horses for three months, but there is no reason why larger quantities should not be treated in the same way by building larger traps or by building several of smaller size.—South Florida Sentinel.

Veterinary Notes

DECREASE IN GLANDERS, IN 1915

In 1913, there were sixty-three cases of glanders in Florida, fifty-two of which occurred in Jacksonville, where the disease was epidemic in horses and mules during the summer months. The State Board of Health expended over \$5,000.00 in reimbursing the owners of condemned animals and for travel expenses.

In 1914, there were only twenty-three cases, a reduction of forty cases. These cost the Board \$1,650.00.

In 1915, the cases were still further reduced, to fourteen in number, which cost the Board \$1,025.00. All the cases, in 1915, were found in Jacksonville.

This gratifying decrease in the prevalence of the disease is due largely to the adoption of a regulation, by this Board, requiring all horses and mules entering the State to have a bill of health showing they were tested and found free of glanders, by a State veterinarian of the State in which the shipment originated.

Knowledge of this, on the part of dealers, has broken up the practice of buying indiscriminately in the horse and mule markets, and many dealers now adopt the safe method of buying subject to test for glanders.

DOGS CARRY DISEASE

"The dog in the country is a useful and pleasant adjunct to the farm if he is properly controlled and cared for, but when neglected may readily become a carrier of disease to stock, in addition to gaining opportunity to kill sheep and destroy gardens and other property. Dog ordinances, as a general rule, have been intended chiefly to curb the dog's power of doing harm by attacking, biting, killing, or running sheep or stock. The part that he plays as a carrier of disease to animals only recently has been recognized, according to the zoologists of the department, who believe that when this is better understood, rural ordinances and laws which lessen this danger will gain the support of the community.

"Of the disease carried to stock by dogs, the foot-and-mouth disease is probably of the greatest interest at this time. In this case the dog acts as a mechanical carrier of infection. The dog which runs across an infected farm easily may carry in the dirt on his feet the virus of this most contagious of animal diseases to other farms and thus spread the disease to the neighboring herds. In infected localities it is absolutely essential, therefore, to keep all dogs chained and never to allow them off the farm except on leash.

"There are, however, many other maladies in the spread of which the dog takes an active part. In Bulletin 260 of the department, "The Dog as a Carrier of Parasites and Disease," it is pointed out that rabies, hydatid, ringworm, favus, double-pored tapeworm, roundworm and tongue worm are often conveyed to human beings in this way. It occasionally happens also that the dog helps fleas and ticks in transmitting bubonic plague or the deadly spotted fever.

"Hydatid disease is caused by the presence in the liver, kidney, brain, lungs and other organs of a bladder worm or larval tapeworm. Bladder worms are often as large as an orange and may be larger. A dog which is allowed to feed on the carrion or the raw viscera of slaughtered animals may eat all or part of a bladder worm containing numerous tapeworm heads. These tapeworm heads develop in small segmented tapeworms in the intestines of the dog. The tapeworms in turn develop eggs which are passed out in the excrement of the dog. They are spread broadcast on grass and

in drinking water where animals can very well eat them and thus become infected. The hog is particularly liable to this disease because of its rooting habits. The eggs may get into human food, and persons who allow dogs to lick their hands and face also run the risk of getting the eggs of the tapeworm in their systems.

"Prevention on the farm consists in so restraining the dog that he can not get at carrion or raw viscera. Viscera should be boiled before being fed to dogs and should never be thrown on the fields. If not cooked and fed, viscera and carcasses should be burned, buried with lime, or so disposed of as not to be accessible to dogs. Proper feeding of the dog is essential, and the owner who does not feed a dog properly has no right to keep one.

"The parasite which causes gid in sheep somewhat resembles the hydatid worm. A dog allowed to eat the brain of a giddy sheep may swallow this parasite and later distribute the eggs of the resulting tapeworm over the pasture. Sheep while grazing swallow the eggs with the grass which they eat. In the case of sheep dogs it is important to administer vermifuges often enough to keep them free of these worms. In the case of sheep measles, the bladder worm in the meat, typical of this disease, is swallowed by the dog and again the tapeworm eggs are passed by the dog to grass or water, and there are eaten by sheep. Of the external parasites which dogs may carry to animals, fleas and the various kinds of ticks are both troublesome and dangerous. The remedy is clear. The owner must keep his dog clean, not merely for the comfort and happiness of the dog, but to prevent it from becoming a carrier of disagreeable and dangerous vermin.

"These reasonable measures, important to the stock on the farm, have a direct connection with the health of the family. Where ringworm or other skin diseases break out among the children, or the worm parasites develop, it is well to determine whether a dirty or uncared-for dog may not be carrying infection on his skin or hair, or be conveying disease from carrion directly to the food and persons of his friends. Even if no one is infected with disease, the folly of allowing a dog to remain dirty and have the freedom of a home where personal cleanliness and hygiene are respected is apparent."—Weekly News Letter, U. S. Department Agriculture.

NEW TREATMENT FOR BLACK-TONGUE IN DOGS

Dr. H. B. F. Jarvis, of Columbia, S. C., comes forward with a new theory as to the causation of so-called black-tongue, in dogs, wants the name black-tongue dropped, substituted the names *gastro-enteritis*, and *necrotic stomatitis*, and, most important of all, suggests a new remedy which, in his hands, is giving good results.

He claims never to have found hook-worms, in dogs, although he has made many observations with this end in view.

His treatment consists in the administration of Bulgare tablets, Galactenzyme tablets and other proprietary preparations which are prepared from cultures of *Bacillus bulgaricus*, and which are successfully used in certain affections of the alimentary tract in the human being. This bacillus has the property of forming lactic the property of acid from sugar and is able to produce 4 per cent lactic acid. Milk only is fed and the lactose or milk sugar is acted upon by the bacillus and lactic acid is formed.

When the dog will not eat, which is often the case, four to six tablets three times daily are given, alone. The dog usually begins to lap milk in thirty-six hours. No other treatment is advised, except that at the end of the bacillary treatment, a general tonic is administered. When the mouth is sore, mouth-washes, such as 1 per cent, permanganate of potash, or other antiseptic mouth-wash is employed.

TICK ERADICATION

The Secretary of Agriculture, Washington, D. C.

Dear Sir: As it appears from the reports of the Federal inspector who has been engaged, in co-operation with the State and County authorities in eradicating the cattle tick from Broward and Dade Counties, and that part of Palm Beach County south and west of the Hillsboro drainage canal, that the work has been brought to a successful conclusion, I hereby request that this territory be declared free from the cattle tick and that the same be released from quarantine.

Yours very truly,

Joseph Y. Porter, State Health Officer.

UNITED STATES DEPARTMENT OF AGRICULTURE, Bureau of Animal Industry

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Sir: We are in receipt of your letter of the 10th instant addressed to the Secretary of Agriculture, Washington, D. C., requesting release from Federal quarantine counties of Broward and Dade, and that part of Palm Beach County south and west of the Hillsboro drainage canal. You are advised that this matter will be brought to the attention of the Secretary, along with other territory that will be submitted, at an early date.

Very respectfully,

E. M. Nighbert, Inspector in Charge.

EMN:A

BOUNDARIES OF TERRITORY THAT WILL BE DECLARED TICK-FREE

**County Commissioners of Broward County Requests State Board of Health
to Establish Cattle Quarantine Line for Protecting Area That Has Been
Freed of the Cattle Tick.**

"Beginning at the Atlantic Ocean, and running in a westerly direction along the Hillsboro Canal to Lake Okeechobee, thence westerly along the shores of Lake Okeechobee, to the Lee County line, then south along the Palm Beach, Broward and Dade County lines to the southwest corner of Dade County, thence east along the south line of Dade County, to the Atlantic Ocean.

"We are informed by the Chairman of the Stock Growers Association that the territory embraced within these boundary lines is free from the cattle tick, and we ask that the necessary steps be taken to maintain the quarantine in said territory.

Respectfully yours,
Frank A. Bryan, Clerk County Commissioners."

DIPPING VAT AND SHIPPING PENS TO BE BUILT AT JACKSONVILLE

At its recent meeting held in Pensacola the State Board of Health, which has charge of animal diseases as well as those of man, authorized, the building of a dipping vat and non-infectious feeding pens at Jacksonville.

The importance of this action is indicated when it is known that animals

can be dipped at Jacksonville and shipped direct from Jacksonville to the two tick-free Florida Counties, Broward and Dade.

The specially-arranged feeding pens will also permit of tick-free cattle being shipped from the North and unloaded at Jacksonville for feed, water and rest, without their becoming infested with the cow tick prior to reaching the tick-free counties of Broward and Dade; something that can not now be done.

These facilities will be built according to Federal requirements and under Federal supervision, by the State Board of Health and by the Jacksonville Union Stock Yards Company and the Board's action means much to the animal industry of the State.

DIVORCE PROCEEDINGS AGAINST CATTLE TICK

In the Court of Common Sense, Judicial District of Men's Minds—In
Chancery.

State of Florida vs. Texas F. Tick. Bill for divorce.

The plaintiff, State of Florida, complains that she had been wedded to the defendant, Texas F. Tick, since the first cow entered her domain. She prays complete separation and divorce on the grounds hereinafter stated.

Plaintiff states that the marriage was a mistake and a failure, that the defendant has, by his cruel and unmerciful treatment of her, made her an object of ridicule and contempt among her sister States. He has brought humiliating discrimination upon her from her sisters and her paternal Uncle Sam.

He has prayed upon her cattle and sucked their blood and made them sick. He has damaged their hides. By his treatment of them he has decreased their value from one-half to two-thirds. He has reduced the milk flow of her dairy cattle at least one-half. He has appropriated to his own use the blood manufactured from valuable feed for milk and meat production, and has thus effected the loss of millions of dollars annually to her people.

The defendant has propagated and encouraged the spread of the Texas fever organism which killed plaintiff's cattle. He has discouraged purebred cattle, capital and industry. He has robbed babies of wholesome milk, and otherwise endangered the prosperity and welfare of her people.

For the foregoing and other reasons, the plaintiff asks a divorce, and further that the jury of common people will render the following verdict as just punishment to defendant: "We, the jury, find the defendant guilty and recommend that he be dipped in poison until dead."

Witness my hand and seal of office this 24th day of February, A. D. 1916.

(Seal)

POOR LAND, Clerk.

By PUREBRED CATTLE,

Deputy Clerk.

Health & Prosperity, Attorneys for Plaintiff.

—From Agricultural News Service, University of Florida.

Summary of Public Health Administration, January

SOUTHWESTERN DISTRICT

Tampa: Routine work, office of the Assistant to the State Health officer. Diagnosis smallpox case. Supervision of cases in isolation hospital. Inspections by Sanitary Patrolman (violation of sanitary laws ordered abated): Screening Law—restaurants 1, lunch counters 1, meat shops 2, grocery stores 5, bakeries 3, fruit stands 2, candy wagon 1, fertilizer factory 1. Surface Closet and Water Carriage Laws—private residences 34. Sanitary Nuisance Laws—cigar factories 2, vegetable peddlers 5. Communicable diseases—smallpox 1, tuberculosis 1, scarlet fever 4, diphtheria 21. Fumigations, releases, etc., 42.

Parish: Conference with physicians regarding pellagra prevalence.

Manatee County: Chance meeting with Manatee County Commissioners; conference on screening of schools.

Gainesville and Cedar Key: Investigation of trachoma situation at Gainesville and Cedar Key, as requested by the State Health Officer. Report of conditions made.

Seffner: Investigation of smallpox.

WESTERN DISTRICT

Pensacola: Routine work, office of the Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections by sanitary patrolman as follows (violations of sanitary laws ordered abated): Screening Law—restaurants 1, lunch counters 2, dining rooms 1, meat shops 2, butcher shops 1, grocery stores 2, fruit stands 10. Communicable diseases—smallpox 5, typhoid fever 5, tuberculosis 7, scarlet fever 3, cerebro-spinal meningitis 1. Fumigations, releases, etc., 6.

SOUTH TROPIC DISTRICT

Key West: Routine work, office of the Assistant to the State Health Officer. Investigation of reported case Malta Fever. Management of communicable diseases and supervision of inspections by sanitary patrolman. All violations of sanitary nuisance abated. Routine laboratory work.

Key West to Fort Pierce: Detail on Educational Health Exhibit Train.

SOUTH CENTRAL DISTRICT

Ocala: Routine work, office of the Assistant to the State Health Officer. Investigation case pellagra; instructions given regarding diet. Consultation with attending physician diphtheria case. Medical inspection of school children with city physician. Diagnosis case chicken pox. Investigation case diphtheria.

CENTRAL DISTRICT

Gainesville: Routine work, office of the Assistant to the State Health Officer. Lectures to High School.

Cedar Keys: Investigation of trachoma.

Oldtown, Cross City and Scrub Creek: Treating school children for hookworms.

Alachua, High Springs, Newberry, Archer, Micanopy, Hawthorne and Waldo: Lectures to high schools on Hygiene.

EAST COAST DISTRICT

St. Augustine: Routine work, office of the Assistant to the State Health Officer.

DeLand: Management of outbreak of smallpox.

Melbourne: Illustrated lecture on the subject of "Vital Statistics and Better Babies."

DeLand: Demonstration of public health exhibit at Volusia County Fair.

WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Bacteriologist and Assistant to the State Health Officer, Jan. 1 to 10th.

SPECIAL DETAILS

Lakeland: Sanitary survey. Study of local conditions and conference with all city officials.

Knights: Assisting examining physician with medical inspection of school children. Sanitary inspection of buildings, grounds and toilets.

Turkey Creek: Visit case tetanus; inspection of premises; study of history of case and management.

Plant City: Visit physicians regarding completion and sending in of all vital records for past year. Collection of data on pellagra. Inspection of dairy with mayor and pure food commissioner of Tampa. Initial work and correspondence relative to the control of milk supply and the organization of a health department. Visit indigent case of typhoid; inspection and management of case and condition of premises. Visit cases diphtheria with attending physician. Inspection of school toilets and advice for sanitary construction and maintenance of same. Examination of specimens for intestinal parasites.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Demonstration of public health exhibits in towns along Florida East Coast Railway, as follows: St. Augustine, Miami, Key West, Marathon, Homestead, Florida City, Goulds, Perrine, Cocanut Grove, Lemon City, Little River, Arch Creek, Fulford, Ojus, Hallandale, Dania, Ft. Lauderdale, Pompano, Deerfield, Delray, Boynton, Lake Worth.

PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes," Vol. XI, No. 1, January, 1916, pp. 40. Press service bulletins to Florida newspapers: January 5, "Street Manners;" January 12, "Florida's Educational Health Exhibit Train;" January 19, "Health is Wealth;" January 26, "Florida's Health Conditions."

Publications out in January: Pub. 153, "Home Sanitation;" Pub. 154, "Health Exhibit Train Advance Posters;" Pub. 155, "Demonstration Train of the State Board of Health."

Distribution of literature during January:

Mailed upon request.....	1,526
Distributed on Educational Health Exhibit Train.....	8,200
Press service bulletins to Florida newspapers, 4 issues.....	1,100
Health Notes, January, mailing list.....	8,900

Total pieces distributed.....19,726

SMALLPOX

Reported cases of smallpox in Florida, January, 1916:

DeLand, Volusia County.....	10
Mayo, Lafayette County.....	1
Molino, Escambia County.....	5
Nassauville, Nassau County.....	7
Total number cases reported, January, 1916.....	23

DISTRICT TUBERCULOSIS NURSE INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, January 31, 1916

<i>Residence of Cases Visited to Date, by Districts</i>	<i>Total Number of Patients Under Instruction Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Patients in District Under Instruction to Date</i>	<i>Total Number of Patients Following Instruction</i>
Western	104	6	3	1	..	106	86
Southwestern	148	25	6	2	1	164	124
Central	92	..	..	..	..	..	..
North Central	176	43	3	7	..	209	109
West Central	119	36	5	1	1	148	94
East Coast	240	48	4	6	5	273	272
Total for State.....	879	158	21	17	7	900	685

BIOLOGICAL PRODUCTS

Distribution of Biological Products during January (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only). Number of persons receiving treatment:

<i>County and Town</i>	<i>Anti-Smallpox Vaccine</i>	<i>Anti-Rabic Vaccine</i>	<i>Anti-Typhoid Vaccine</i>	<i>Diphtheria Antitoxin Curing and Immunizing</i>	<i>Tetanus Antitoxin Immunizing</i>
ALACHUA					
Bell	10	..	..	..	..
Gainesville	20	..	..	..	..
COLUMBIA					
Lake City .....	..	..	11	..	..
DE SOTO					
Wauchula .....	..	..	..	1	..
DUVAL					
Jacksonville	59	..	..	1	..
ESCAMBIA					
Pensacola	50	..	1	..	..
GADSDEN					
Chattahoochee	150	..	..	..	..
HILLSBOROUGH					
Tampa .....	..	..	..	1	..
LAFAYETTE					
Mayo	110	..	..	..	..
LEVY					
Otter Creek .....	..	1	..	..	..
MADISON					
Ebb .....	..	1	..	..	..
NASSAU					
Fernandina	80	..	..	..	..
POLK					
Fort Meade .....	..	..	..	2	..
PUTNAM					
Palatka	10	..	..	..	..
SEMINOLE					
Chuluota	10	..	..	..	..
SAINT JOHNS					
St. Augustine	50	..	..	..	..
TAYLOR					
Loughridge .....	..	2	..	..	..
VOLUSIA					
DeLand	20	..	..	..	..
New Smyrna	50	..	..	..	..
WALTON					
DeFuniak Springs .....	..	..	..	3	..
Total.....	619	4	12	8	..

CRIPPLED CHILDREN

NAMES	In St. Luke's 1-1-16							Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment Feb. 1st, 1916
	In Brewster (Col.) 1-1-16	Outside Treatment 1-1-16	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment Examined, Not Admitted	Total Cases During Month				
A. N.	1	..	..	..	..	..	1	13th Abscess.....	.....	Tbc. Spine.....	1
F. P.	1	..	..	..	..	..	1	.....	.....	Tbc. Hip.....	1
H. M.	1	..	..	..	..	..	1	.....	.....	Tbc. Ileum.....	1
A. H.	1	..	..	..	..	..	1	.....	1-27-16 Improved ...	Polio. Deformity .....	..
M. P.	..	1	..	..	..	..	1	.....	.....	Lateral curvature Spine....	1
L. H.	..	1	..	..	..	..	1	Braced Shoes 1-22-16 .....	.....	Club Feet	1
R. F.	..	1	..	..	..	..	1	.....	1-31-16 Improved ...	Polio. Paralysis Deformity ...	1
W. W.	..	1	..	..	..	..	1	.....	.....	Polio. Paralysis	1
B. Y.	..	1	..	..	..	..	1	.....	.....	Polio. Paralysis	1
R. G.	1	..	..	..	..	..	1	.....	1-25-16 Cured	Club Feet.....	..
C. W.	1	..	..	..	..	..	1	Casts 8th.....	.....	Club Feet.....	1
B. K.	..	1	..	..	..	..	1	.....	.....	Club Feet.....	1
R. W.	1	..	..	..	..	..	1	Casts 8th.....	.....	Deformity, Spastic Paralysis..	1
O. D.	1	..	..	..	..	..	1	.....	.....	Tbc. Spine	1
S. W.	..	1	..	..	..	..	1	.....	.....	Lateral Curvature Spine...	1
R. M.	1	..	..	..	..	..	1	.....	1-27-16 Cured	Bow Legs.....	..
D. W.	1	Trans. to outside treatment 10th .....	..	..	..	..	1	Casts 6th, Home 8th .....	.....	Club Feet.....	1
F. B.	..	..	..	1	..	..	1	Arthroplasty knee 12th .....	.....	Ankylosis knee..	1
F. M.	..	..	1	..	..	..	1	.....	.....	Bow Legs.....	..
W. H.	..	..	1	..	..	..	1	1-25 Bone resection .....	.....	Osteomyelitis..	1
S. B.	..	..	1	..	..	..	1	Hookworm treatment .....	.....	Polio. Paralysis..	1
Total	10	1	6	1	2	1	20	.....	4	.....	16

(MALARIA)

TOWN	Diphtheria	Gonorrhea	Etiocautummal	Quarant	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Rabies	Ascaris	Ringworm	Tapeworm	Trichurias	Oxyuris	Amoeba	Total
Malone .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Mayo .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Melrose .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Miami	1	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	4
Millville .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Mt. Dora.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
New Smyrna.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Nichols	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	2
Ocala	1	..	..	..	1	..	1	8	..	..	..	..	..	..	..	..	11
Ojus .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Oklawaha, Rel. C...	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	3
Orlando .....	..	1	..	..	1	1	1	2	4	..	1	..	..	..	..	..	11
Ozona .....	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	3
Palatka .....	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	2
Panama City.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Perry .....	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	2
Pensacola .....	..	12	..	..	..	..	2	9	11	..	1	..	..	..	..	..	35
Plant City.....	2	1	..	..	..	..	1	..	2	..	..	..	..	..	..	..	6
Pompano .....	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	2
Punta Gorda.....	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	2
Princeton .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Reddick .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
River Junction.....	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2
St. Augustine.....	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	2
St. Petersburg.....	1	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..	4
San Antonio.....	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	2
Sanford	3	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	4
Sneads .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Sutherland .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
Tallahassee	2	..	..	..	1	1	1	2	..	..	..	..	..	..	..	..	7
Release Cult.....	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Tampa	19	9	..	..	..	11	7	4	..	2	1	..	6	1	1	1	61
Titusville	2	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	5
Release Cult.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Carrier Cases.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Wauchula	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2
*Key West.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total.....	118	56	1	..	5	8	39	57	82	2	5	1	1	7	1	1	384

VETERINARY DIVISION

Cattle dipping vats reported constructed during January, 1916:

None.

Total number of vats reported constructed to February 1, 1916..... 88

INTERSTATE SHIPMENTS OF DIPPED CATTLE INTO DADE AND BROWARD COUNTIES

Jan. 4, Fort Pierce to Miami for immediate shipment.....	35	cattle
Jan. 7, Jacksonville to Fort Lauderdale.....	3	cattle
Jan. 9, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Jan. 10, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Jan. 12, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Jan. 16, Jacksonville to Miami.....	87	cattle
Jan. 23, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Jan. 26, Fort Pierce to Miami for immediate slaughter.....	36	cattle
Jan. 30, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Total number of cattle.....	336	
Total number of shipments.....	9	

GLANDERS

Diagnosed by Veterinarian during January, 1916:

Key West, Monroe County.....1 mule, \$33.33

Jacksonville, Duval County.....1 horse, 75.00

Total number of cases in 1916, to February 1.....2

IMPORTATION OF CERTIFIED LIVE STOCK INTO FLORIDA

Jan. 1.	Chester, S. C., to Pompano.....		3 mules
Jan. 1.	Atlanta, Ga., to Lake City.....	4 horses	22 mules
Jan. 1.	Valdosta, Ga., to Deerland.....		12 mules
Jan. 3.	Chicago, Ill., to Madison.....		26 mules
Jan. 3.	Camilla, Ga., to Homestead.....		1 mule
Jan. 3.	Chattanooga, Tenn., to Fort Lauderdale.....	2 hogs	
Jan. 4.	Chicago, Ill., to Madison.....		30 mules
Jan. 4.	Chicago, Ill., to Monticello.....		31 mules
Jan. 4.	Thomasville, Ga., to Monticello.....		6 mules
Jan. 4.	Owensboro, Ky., to St. Augustine.....	1 horse	2 mules
Jan. 4.	Atlanta, Ga., to Branford.....	3 horses	16 mules
Jan. 4.	Atlanta, Ga., to Monticello.....	2 horses	18 mules
Jan. 4.	Atlanta, Ga., to Lake City.....	3 horses	16 mules
Jan. 4.	Atlanta, Ga., to Jacksonville.....		18 mules
Jan. 5.	Oklahoma City, Okla., to Lake City.....		25 mules
Jan. 5.	Chicago, Ill., to Live Oak.....	1 horse	28 mules
Jan. 5.	Chicago, Ill., to De Funiak Springs.....	9 horses	19 mules
Jan. 5.	Gleason, Tenn., to Webster.....		1 pig
Jan. 5.	Danville, Ky., to Gainesville.....		26 mules
Jan. 5.	Atlanta, Ga., to Jacksonville.....	3 horses	18 mules
Jan. 6.	Lewisburg, Tenn., to Bailey.....	1 calf	
Jan. 6.	Atlanta, Ga., to Jacksonville.....	3 horses	15 mules
Jan. 6.	Atlanta, Ga., to Jacksonville.....	10 horses	6 mules
Jan. 7.	Thomasville, Ga., to Tampa.....		12 cattle
Jan. 7.	Atlanta, Ga., to Jacksonville.....	10 horses	6 mules
Jan. 7.	Atlanta, Ga., to Perry.....	3 horses	14 mules
Jan. 8.	Murfreesboro, Tenn., to Grandin.....		1 hog
Jan. 8.	Kansas City, Mo., to Miami.....		87 cattle
Jan. 9.	Chicago, Ill., to Ponce de Leon.....	17 horses	8 mules
Jan. 10.	Atlanta, Ga., to Jacksonville.....		22 mules
Jan. 10.	Cimarron, Kans., to Arcadia.....	3 horses	
Jan. 10.	Lafayette, Ga., to Vero.....	4 horses	
Jan. 10.	Atlanta, Ga., to Miami.....	5 horses	17 mules
Jan. 11.	Ft. Wayne, Ky., to Kenwood.....	1 horse	
Jan. 11.	Rolla, Mo., to Dade City.....	3 horses	
Jan. 12.	Sheffield, Ky., to Madison.....		7 mules
Jan. 12.	Atlanta, Ga., to Fort Pierce.....	2 horses	10 mules
Jan. 13.	Lebanon, Tenn., to Monticello.....		29 mules
Jan. 13.	Lebanon, Tenn., to Perry.....		28 mules
Jan. 14.	Lebanon, Tenn., to Monticello.....	7 horses	21 mules
Jan. 14.	Fairmount, Ga., to Millburn.....		2 cattle
Jan. 15.	Sherburne, N. Y., to Pensacola.....		2 calves
Jan. 15.	Americus, Ga., to Panama City.....		1 hog
Jan. 15.	Dannville, Ky., to Crescent City.....		1 hog
Jan. 17.	Winston-Salem, N. C., to Cottondale.....		1 pig
Jan. 17.	Williamsport, O., to La Belle.....	1 horse	
Jan. 18.	Aiken, S. C., to Clearwater.....	2 horses	
Jan. 18.	Grant City, Mo., to Tallahassee.....	10 horses	18 mules
Jan. 18.	Waycross, Ga., to Gordonville.....		6 mules
Jan. 18.	Atlanta, Ga., to Branford.....	2 horses	10 mules
Jan. 18.	Atlanta, Ga., to Palatka.....	6 horses	9 mules
Jan. 18.	Atlanta, Ga., to Lake City.....	3 horses	11 mules
Jan. 19.	Atlanta, Ga., to Jacksonville.....		18 mules
Jan. 19.	Atlanta, Ga., to Jacksonville.....	22 horses	2 mules
Jan. 20.	Chicago, Ill., to Cottondale.....	12 horses	16 mules
Jan. 20.	Atlanta, Ga., to Jacksonville.....	8 horses	14 mules
Jan. 21.	Thomasville, Ga., to Tampa.....		12 cattle
Jan. 21.	Sweetwater, Tenn., to Raiford.....		1 mule
Jan. 22.	Winchester, Ky., to Umatilla.....		4 mules
Jan. 22.	Cincinnati, O., to Palatka.....	1 horse	
Jan. 24.	Ridgeway, Mo., to Martel.....		1 hog
Jan. 25.	Columbia, S. C., to Perry.....		1 hog
Jan. 25.	Atlanta, Ga., to Tampa.....	21 horses	1 mule
Jan. 25.	Finger, Tenn., to Wauchula.....	3 hogs	
Jan. 25.	Finger, Tenn., to Capitola.....	3 hogs	
Jan. 26.	Atlanta, Ga., to Jacksonville.....	9 horses	25 mules
Jan. 26.	Atlanta, Ga., to Lake City.....	7 horses	14 mules
Jan. 26.	Lebanon, Tenn., to Jasper.....		1 cow
Jan. 26.	Chicago, Ill., to Starke.....	6 horses	20 mules
Jan. 26.	Chicago, Ill., to Live Oak.....	5 horses	21 mules
Jan. 26.	Mobile, Ala., to Ponce de Leon.....	2 horses	
Jan. 27.	Crawford, Neb., to Live Oak.....	13 horses	12 mules
Jan. 27.	Fisher, Ill., to Greensboro.....	4 horses	
Jan. 27.	Waycross, Ga., to Bartow.....		4 mules
Jan. 28.	La Grange, Ga., to Tampa.....	1 horse	
Jan. 29.	La Grange, Ga., to Homosassa.....		1 pig
Jan. 30.	Gulfport, Miss., to Homestead.....	5 horses	21 mules
Jan. 30.	St. Louis, Mo., to Milton.....	12 horses	13 mules
Jan. 31.	Biloxi, Miss., to Tampa.....	2 horses	
Totals: horses, 248; mules, 740; cattle, 121; hogs, 16.....			1,125
Total number of shipments.....			79

EXPORTATION OF CERTIFIED LIVE STOCK FROM FLORIDA

Jan. 27, Tampa to Tifton, Ga.....	1 horse
Jan. 28, Jacksonville, to Prosperity, S. C.....	1 hog
Jan. 31, Tampa to Broadway Siding, S. C.....	1 horse
Jan. 31, Jacksonville to Troy, N. C.....	7 hogs
Totals: horses, 2; hogs, 8.....	10
Total number of shipments.....	4

HOG CHOLERA AGENTS APPOINTED DURING JANUARY, 1916

Eldridge Bogardus, South Jacksonville, Duval County.

HOG CHOLERA SERUM DISTRIBUTED, JANUARY, 1916

	C. C. Serum Distributed
Alachua	19,150 c.c.
Baker	c.c.
Bay	c.c.
Bradford	20,850 c.c.
Brevard	c.c.
Broward	c.c.
Calhoun	c.c.
Citrus	2,500 c.c.
Clay	1,100 c.c.
Columbia	c.c.
Dade	c.c.
De Soto	3,000 c.c.
Duval	800 c.c.
Escambia	c.c.
Franklin	c.c.
Gadsden	1,000 c.c.
Hamilton	2,500 c.c.
Hernando	300 c.c.
Hillsboro	500 c.c.
Holmes	1,000 c.c.
Jackson	10,950 c.c.
Jefferson	1,350 c.c.
LaFayette	c.c.
Lake	2,250 c.c.
Lee	c.c.
Leon	1,500 c.c.
Levy	7,050 c.c.
Liberty	6,850 c.c.
Madison	4,000 c.c.
Manatee	c.c.
Marion	c.c.
Monroe	c.c.
Nassau	c.c.
Orange	c.c.
Osceola	c.c.
Palm Beach	c.c.
Pasco	200 c.c.
Pinellas	c.c.
Polk	2,250 c.c.
Putnam	200 c.c.
Santa Rosa	1,500 c.c.
Seminole	c.c.
St. Johns	1,750 c.c.
St. Lucie	c.c.
Sumter	500 c.c.
Suwanee	3,000 c.c.
Taylor	c.c.
Volusia	100 c.c.
Wakulla	c.c.
Walton	1,350 c.c.
Washington	2,150 c.c.

Total sold 850 c.c.

Total, 99,650 c.c.

Estimated number of hogs treated, January.....	4,529
Estimated weight of hogs treated, January.....	276,269 lbs.
Amount of hog cholera serum purchased during January.....	100,000 c.c.
Cost of serum purchased during January.....	\$750.00
Amount of serum distributed in 1916, to February 1.....	99,650 c.c.
Estimated number of hogs treated in 1916, to February 1.....	4,529
Estimated weight of hogs treated in 1916, to February 1.....	276,269 lbs.
Cost of serum purchased in 1916, to February 1.....	\$750.00

DETAILS PERFORMED BY THE VETERINARY DIVISION

Jan. 2, three cows dipped at Jacksonville; two mules inspected for ticks; Jan. 10, one horse tested for glanders, Jacksonville; Jan. 15, thirty-seven cattle intradermally tested for tuberculosis, Ocala; Jan. 15-16, investigation of cattle disease, Floral City; Jan. 16, making dip and dipping 87 cattle, Jacksonville; Jan. 16, inspection of 22 horses and mules for ticks, Jacksonville; Jan. 18, addressing class at Farmer's Short Course, University of Florida, Gainesville; Jan. 20-21, investigating cattle disease, State Insane Asylum, River Junction; Jan. 21, investigating disease in horses, Macclenny; Jan. 22, demonstration of hog cholera treatment at State Prison Farm, Raiford.

Vital Statistics

INSTRUCTIONS TO LOCAL REGISTRARS

Much improvement in the reports of Vital Statistics received in this office will be made, and considerable correspondence avoided, if local registrars will observe the following rules.

BIRTHS

Be sure to require the exact date of birth, the sex of the child and whether or not the same is legitimate are both important and should be answered.

Each certificate of birth should show whether the child was "born alive" or "stillborn."

In case of twins or other plural births, a separate certificate of birth should be required for each child born.

Always be sure to see that the proper place of birth is stated—if outside the municipality so designate it.

The signature of the physician or midwife is essential. In case the midwife is unable to sign her name, the certificate of birth should be made over "her mark."

STILL BIRTHS.

Each stillbirth should be reported as a birth and a death and a birth and death certificate is required in such cases.

In case of twins or other plural still births a separate certificate of birth and death is required for each child.

For registration purposes, stillbirths should include all children who do not live any time whatever, no matter how brief, after birth.

No child that shows any evidence of life after birth should be registered as a stillbirth.

Birth (completion of birth) is the instant of complete separation of the entire body (not body in the restricted sense of the trunk, but the entire organism, including head, trunk and limbs) of the child from the body of the mother. The umbilical cord need not be cut or the placenta detached in order to constitute complete birth for registration purposes. A child dead or dying a moment before the instant of birth is a stillborn, and one dying a moment, no matter how brief, after birth, was a living child, and should not be reported as a stillbirth.

DEATHS

Be sure to state the exact place of death—if the same occurred outside the municipality so state it.

Full name of the deceased should be stated.

Be sure to require an answer to all the items under the "PERSONAL AND STATISTICAL PARTICULARS" items 1 to 13 inclusive.

Sex, color and conjugal condition.

If possible the date of birth should be supplied.

Age should always be stated. If unknown give the approximate age.

The birth place of the deceased, the name of the father and maiden name of the mother with the birth place of each are important and should be supplied if possible.

In case information cannot be supplied for any item, do not leave it blank, but write in the word "Unknown," which will clearly indicate that it was impossible to obtain the information required.

The "PERSONAL AND STATISTICAL PARTICULARS" items 1 to 13 inclusive must be made over the "Signature," and not merely the name of the informant.

Under item 1, requiring the "No." and "Street" address, if the death occurs in a hospital, hotel or other institution, the name of such hospital, hotel or other institution should be required instead of the street address, and in case such hospital, hotel or other institution is located outside the city limits, be sure to so state.

In case of deaths in hospitals or other institutions, or if the deceased was a transient or recent resident—the physician should give the required information under item 18, "the time the deceased was at the place of death," "in the State" and "former or usual residence."

The physician should be sure to state the exact date of death, giving the "cause of death" over his signature, with his address and the date on which such certificate was made.

The place and date of burial or removal should be always stated over the "signature" of the "undertaker" or the "person acting as undertaker."

Local registrars should not fail to state the date on which the certificate of birth or death was filed with him—the same to be made over the "signature" of the registrar.

-SIGNATURES

Rubber stamp signatures will not be accepted, nor the name written in with typewriter. The signature of the informant, physician, undertaker (or person acting as such) and the registrar is required on all death certificates, and on birth certificates the signature of the registrar, with the date of filing and the signature of the person reporting the birth (the physician, midwife or parent).

CAUSE OF DEATH

If local registrars will give attention to the causes of death as stated on death certificates and require additional information, much improvement can be made in the reports received by the Bureau of Vital Statistics.

Natural Causes—Name the disease or injury causing death. The statement "Natural Causes" is entirely worthless, although this term is frequently used by coroners.

Anaesthesia or Operation—State the disease or injury requiring an anaesthetic or operation.

Asphyxia—Was it accidental? State how it was produced.

Bowel Trouble—What was the "trouble?" Name the definite dis-

ease. Was it diarrhoea, dysentery, enteritis? Was it cancer, colic, or strangulated hernia?

Cancer, Carcinoma, Malignant Tumors or Sarcoma—State the organ or part of body affected.

Pneumonia—State whether Broncho pneumonia, Lobar pneumonia or Hypostatic pneumonia.

Convulsions—What caused the convulsions? Were they epileptic, puerperal or caused by diarrhoea or enteritis (infants)? Name the disease in which the convulsions occurred. "Convulsions" are merely symptoms and should not be given as a cause of death when it is possible to ascertain their cause.

Crushed—What was the nature of the accident?

Sudden Death—What disease or condition caused the death, if unknown, give the probable cause.

Dropsy—Name the disease in which the "dropsy" occurred. Was it due to organic heart, liver, or kidney disease? In children ascertain whether scarlet fever preceded.

Eclampsia—Give cause. If due to childbirth or pregnancy, so state it.

Fever—Was it typhoid, malarial or scarlet fever? Was it due to pneumonia or tuberculosis?

Fracture—State the manner in which the fracture was produced. State whether accidental, suicidal or homicidal.

Heart Failure—This term with all its forthless synonyms should never be given as the cause of death. If organic heart disease is meant it should be so stated. State disease or condition causing death.

Hemorrhage—From what organ or part of the body? Was it puerperal, or from accident or injury? If so state it. If from the lungs was it due to pulmonary tuberculosis?

Meningitis—Was it Epidemic cerebrospinal meningitis? If due to some disease or injury state the disease or the manner in which the injury was produced.

Poisoning—Name the poisoning and state whether accidental, suicidal or homicidal.

Strangulation—Was this strangulation from disease (diphtheria), choking or hanging? If from disease, state fully. If from hanging state whether suicidal?

Tuberculosis—State organ affected. Do not fail to state pulmonary tuberculosis if lungs were affected.

BIRTH

By DR. C. A. ZINN

The first name of the child should be on the birth certificate. Parents should see to it that the first name of the child is on the certificate. Otherwise in years to come, where there are several children, it might be impossible to identify the different children.

"There is nothing in all the world so important as little children; nothing so interesting. If ever you wish to go in for philanthropy; if

ever you wish to be of any use in the world, do something for little children. If ever you yearn to be truly wise, study children.

"We can dress the sore, bandage the wound, imprison the criminal, heal the sick, and bury the dead, but there is always a chance that we can save the child.

"If the great army of philanthropists ever exterminate sin and pestilence, ever work out our race's salvation it will be because a little child has led them."—David Starr Jordan.

The most important event in the life of any child is the beginning of his existence. It is meet then that proper record should be made of this. How about your baby?

In the near future a certified copy of the official record of your birth will be a legal requirement for proof of age, to establish your right to inherit property, etc. How about yours?

The most crude interpretation of common humanity demands that we protect helpless infants. Perhaps the strongest instinct in the lower animals is the protection of their helpless young. Are you giving your baby a square deal? Start right by having your physician make out a proper birth certificate and file with the health department, as is required by law.

Don't fail to insist that your births, deaths and infectious-contagious diseases be reported to the health officers. This is to your interest as well as to your neighbor's interest. If legal complications should occur you would be hurt in court without a legal record.

An official birth record is the best proof of legitimacy, of descent, of right to inherit, of age for schooling, for work, for voting, for marriage and of citizenship.—From "*Bulletin of the Texas State Board of Health*," March, 1914.

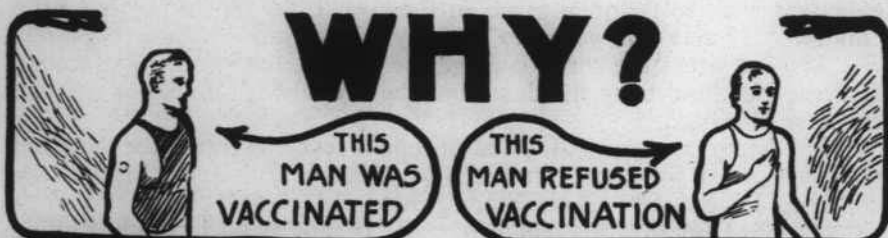
POPULATION

To obtain correct and complete vital statistics it is essential to have (1) a correct enumeration of the population classified according to age, sex, occupation, etc., and (2) a complete and accurate registration of births and deaths and other important events in the life-history of individuals, as marriages and sickness, classified on the same basis as the statistics of population.

An accurate estimate of **population** is the first desideratum, for population forms the natural basis of all vital statistics. In comparing different communities it is necessary to state the deaths and other statistical data in terms of the population, otherwise no true comparison can be instituted.

The actual population is known only by census enumerations. For the years intervening between two census enumerations estimates of the population are made.—*The opening sentences of the 1899 edition of "Vital Statistics" by Dr. Arthur Newsholme, one of England's greatest vital statisticians.*

WHY?



These two men both came in contact with a case of smallpox. The man on the left believed in vaccination, and when it was offered to him free of charge, he accepted it as a wise precaution and protection to his family. Although exposed to smallpox, he did not take the disease. The man on the right was prejudiced by wild and unfounded tales of the evils of vaccination, not knowing that several of the leading countries of the world have made vaccination compulsory to all with no bad results. He disputed the teachings of preventive medicine and pitted his opinion against the accumulated knowledge of scientists who had studied the subject for ages. After coming in contact with the case of smallpox, he came down with the disease. He was taken to the pest house and his friend, who had been vaccinated, visited him daily without taking the disease. When he recovered, he found that his face was pitted for life. His foolishness was then brought home to him with full force, and he is now a firm believer in vaccination.

... CHAS-VAN OSTEEN - 16.

R.N.R.



HEALTH NOTES

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HON. FRANK J. FEARNside, President
Palatka, Fla.

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Pensacola, Fla.

HON. C. G. MEMMINGER
Lakeland, Fla.

EDITED BY

JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

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Jacksonville

BRANCH OFFICES

ASSISTANTS TO THE STATE HEALTH OFFICER

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Miami Fernandina Palatka

BACTERIOLOGICAL LABORATORIES

CENTRAL LABORATORY

Jacksonville

BRANCH LABORATORIES

Tampa Pensacola Miami
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Publication 89, Hog Cholera, January, 1912, pp. 12.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
- Publication 102, Typhoid Fever in Tampa, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 24.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 121, Vital Statistics, All Florida Municipalities can have Vital Statistics, Leaflet, Reprint from Florida Health Notes, August, 1914.
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4. Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 137, Report of Surgeon in Charge of Work under the "Crippled Children" Act, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 8, illustrated.
- Publication 138, Annual Report of Veterinary Department of the State Board of Health of Florida, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 57.
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.

A MODEL SEWAGE DISPOSAL PLANT (Imhoff Design)

FOR A RURAL DWELLING

Of the many widely differing systems designed for the disposal of sewage, the Imhoff Tank is probably the most satisfactory, both in the efficiency of its operation and in the absence of those unpleasant and annoying features so often occurring in the use of other systems.

This plan accomplishes three purposes; first, the separation of the solids from the liquid portion of the sewage; second, the aeration and purification of the liquid effluent by means of a stone filter; and third, the complete digestion of the solids, forming as a final product of such decomposition an odorless and harmless "sludge" which may be readily disposed of.

The Imhoff Tank is of German design, plants of this type having been in successful operation for a number of years in that country, and for some time in many of our own principal cities as well. Heretofore the construction of these tanks has been limited almost entirely to large installations designed to care for the sewage of an entire community; and it is true that these large plants are more nearly perfect in their operation than smaller ones because of the more constant and less variable sewage flow; but a small plant, embodying in its construction the fundamental principles of the Imhoff Tank, and designed for the use of a single family, is entirely practicable for rural dwellings which have water connections but where a sewage system is not accessible.

The accompanying photographs and drawings will serve to show more clearly the principles involved in the construction and operation of such a tank. Figure 3, a vertical cross section, illustrates the important features. There is a V-shaped *settling chamber* into which the sewage flows from the inlet pipe (as shown in Fig. 2), and through which it passes slowly to the outlet pipe, permitting the settling of the solids which pass through the slot in the bottom of this chamber into the lower compartment of the tank. The V-shaped bottom with its over-lapping edges forms a "trap" or "seal" which prevents the return through this chamber of the gases arising from decomposition of the solid matter. These gases pass upward outside of the wall of the settling chamber, thus allowing an undisturbed flow of the sewage through that compartment and, hence, a more complete settling of the solid matter than can possibly be accomplished in a single-compartment septic tank.

The liquid portion of the sewage is then discharged through the outlet pipe (Fig. 2) and passes to a bed of crushed stone surrounded by a wooden casing, into which it is evenly distributed by means of a perforated "spreader box," as shown in Figure 1. Here the effluent is aerated and further purified as it trickles over the surfaces of the stones, and is finally disposed of by means of a drain pipe laid at the lowest level of the stone bed.

The solids which have been removed from the sewage in its passage through the settling chamber are retained in the lower compartment, or *digestive chamber*, of the tank. The bottom slopes sharply toward the sludge pipe, through which at intervals of three or four

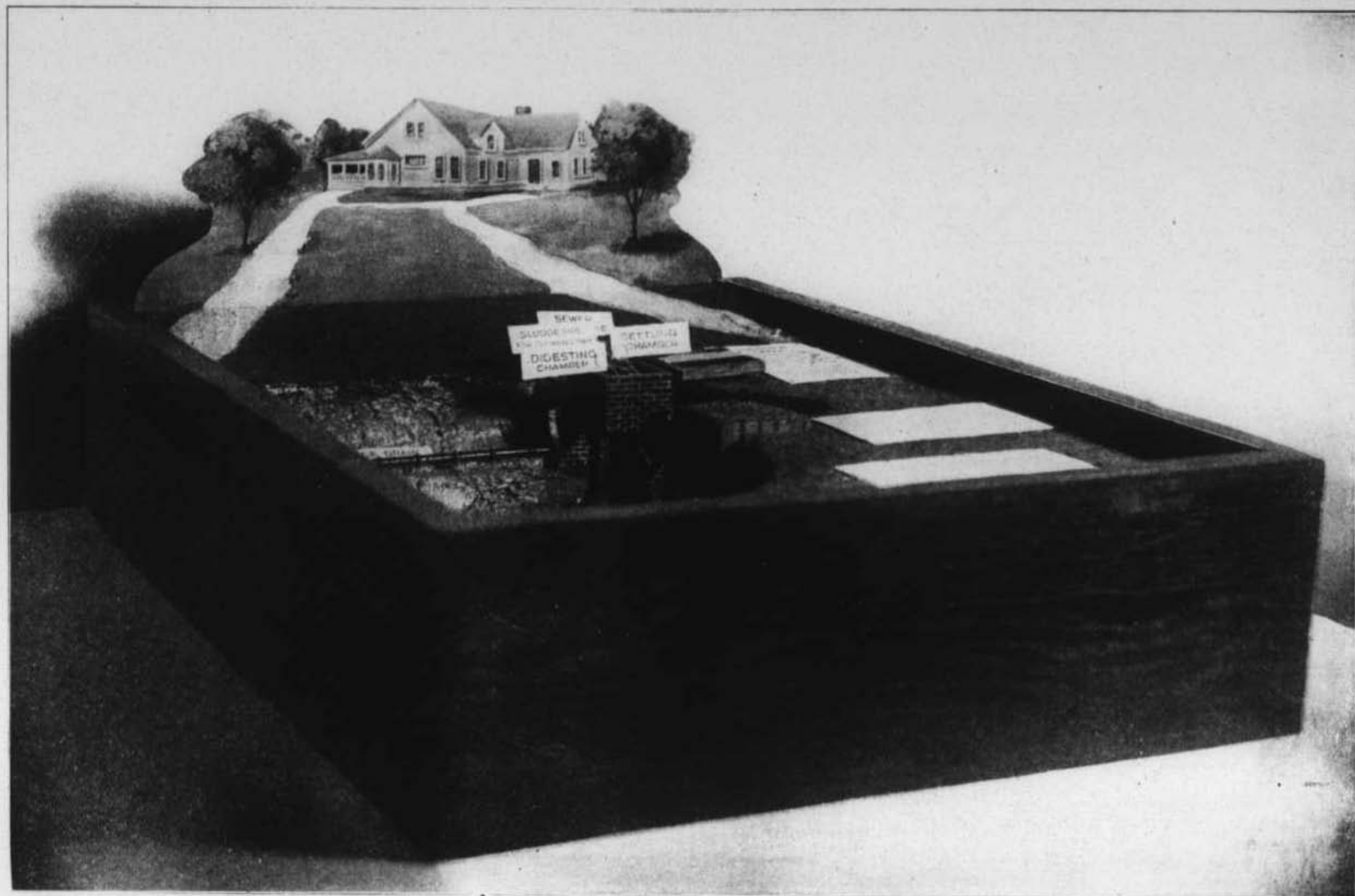


Fig. 5. Birdseye View of Model Sewage Disposal Plant for Rural Dwelling. Small Imhoff Tank and Stone Filter Bed. (Model by Educational Exhibition Company).
(Front wall of tank cut away to show interior construction).

❖ MODEL HOUSE SEWAGE DISPOSAL PLANT ❖

(For 5 to 10 Persons— House with Water Connections)

DESIGNED FOR

FLORIDA STATE BOARD OF HEALTH

ALEXANDER H. TWOMBLY ENG. NEW YORK. Scale $\frac{3}{16}'' = 1'$

DRAWN BY

DEC. 6th 15.

Chas. W. Van Osten

SECTION AT B-B.

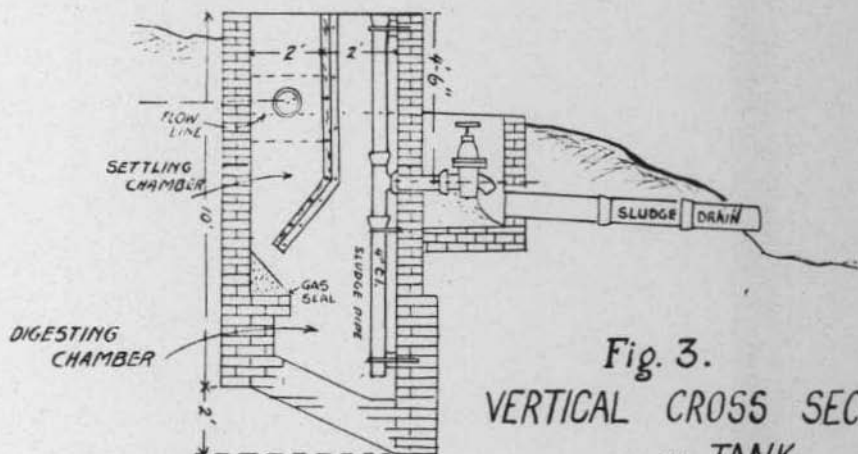


Fig. 3.
VERTICAL CROSS SECTION
OF TANK.

ISOMETRIC

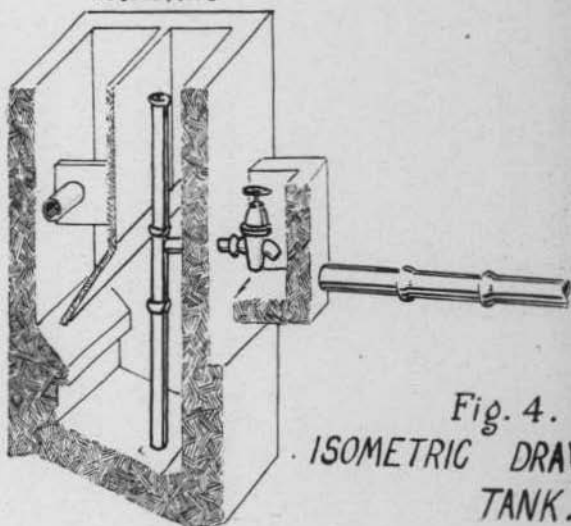


Fig. 4.
ISOMETRIC DRAWING OF
TANK.

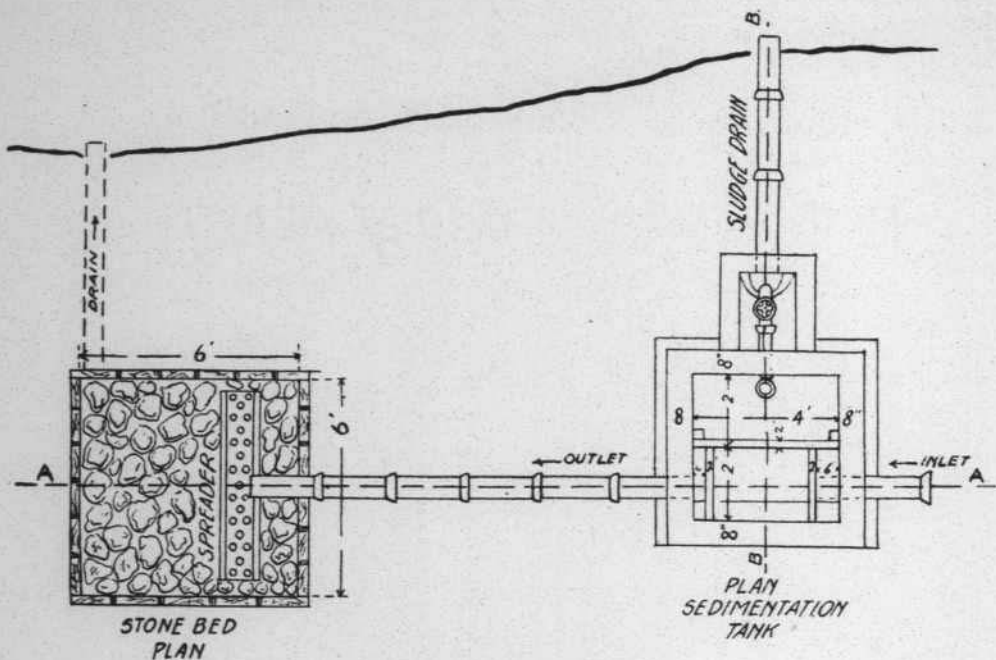


Fig. 1.
PLAN OF SEDIMENTATION TANK AND
STONE FILTER BED.

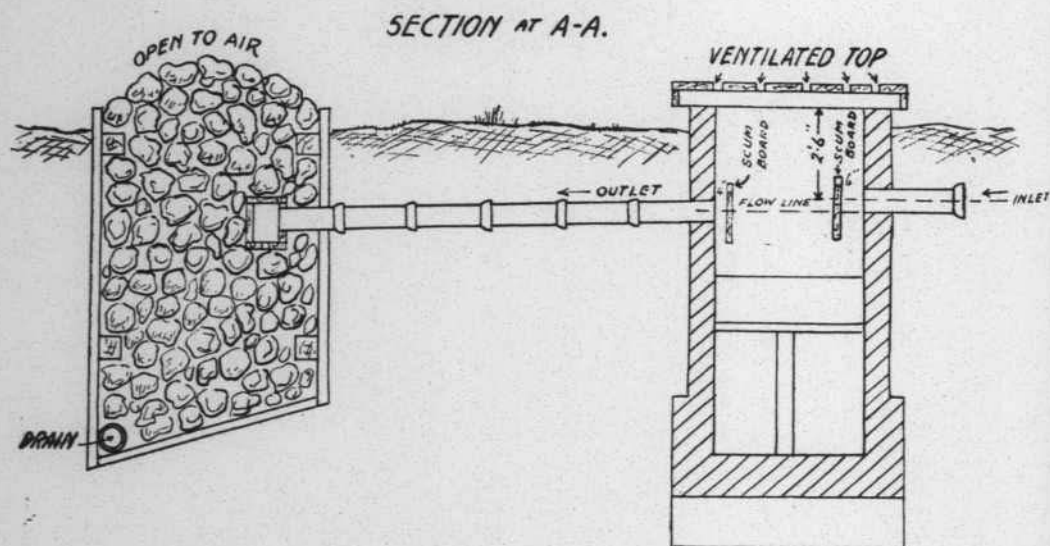


Fig. 2.
VERTICAL LONGITUDINAL SECTION OF TANK AND
STONE BED.

months a portion of the sludge is drawn off. Only about one-third of this residue should be removed at one time. The location of the pipe is such that the old sludge from the bottom is drawn off leaving the newer, partially decomposed solid matter for further digestion. The sludge as it is removed from the tank is discharged upon a drying bed, or into an unused gully where it is allowed to dry, forming a substance very similar in appearance and odor to freshly-turned earth, and in no way objectionable or dangerous.

The construction of the tank is comparatively simple. It may be built of brick with the inner surfaces coated with cement or may be constructed of concrete throughout. The concrete should be mixed in the proportion of one part of cement, two parts of sand, and four parts of broken stone or gravel. If broken stone or gravel are not readily accessible, one part of cement, three of sand and three of shell may be used, which forms a fair substitute.

The tank may be covered but the cover should be so arranged as to afford good ventilation and to be easily removed for inspection. The dimensions of a tank of this type designed for the use of a single family (5 to 10 persons) are indicated upon the accompanying plans, which are drawn to a scale of 5/16 of an inch to 1 foot.

C. H. D.

NOTICE OF EMBALMERS' EXAMINATION

The Board of Embalmers' Examiners of Florida will conduct an examination of embalmers on Friday, May 12th, 1916, at the offices of the State Board of Health, Jacksonville. Applicants for examination should write the State Health Officer, Jacksonville, Fla., for application blank.

PUBLIC HEALTH SERVICE HOSPITALS CURB TRACHOMA

The establishing of small trachoma hospitals in localities where this contagious disease of the eyes is prevalent presents the best solution of the trachoma problem, according to the statement contained in the annual report of the Surgeon General of the United States Public Health Service. The Service now has five trachoma hospitals in the three states of Kentucky, Virginia and West Virginia, and so great has been the number of applicants for treatment that a waiting list has been established. In the past fiscal year 12,000 cases of trachoma have been treated, the larger proportion of which were cured, while those in which a cure was not effected have been greatly improved and rendered harmless to their associates. The great majority of these trachoma patients were people who lived in remote sections far removed from medical assistance, and who, but for the hospital care and treatment provided would have remained victims of the disease practically the remainder of their lives.

"When it is considered," the report of the Service states, "that thousands of persons suffering with trachoma, a dangerous contagious disease, would otherwise remain untreated, it is realized how far-reach-

ing results have been obtained through these trachoma hospitals and the other public health work done in this connection. It would be impossible to estimate with any degree of accuracy the number of people who have been saved from contracting this communicable disease by thus removing these thousands of foci of infection."

In addition to treating persons with the disease the hospitals have been used for educational work. Doctors and nurses have visited the homes of the patients and have explained how to prevent the development and recurrence of the disease. One thousand three hundred and eight such visits were made during the year in Kentucky alone. "It has taken some time," the report continues, "to educate the people afflicted with this disease to the importance of cleanliness and the use of simple hygienic measures in their daily life." That results have been obtained is evidenced by the noticeably better observance of hygienic precautions by those among whom the work has been done.

In addition to the hospital work, surveys were made in 16 counties in Kentucky, especially among school children. Eighteen thousand and sixteen people were examined, 7 per cent being found to have trachoma. Similar inspections in certain localities of Arizona, Alabama and Florida resulted in finding the disease present in from three to six children out of every hundred. Periodic examination of school children for the disease and the exclusion of the afflicted from the public schools, are two of the recommendations the Public Health Service lays emphasis upon.

One of the special features of the trachoma work was the giving of lectures and clinics before medical societies in various counties where trachoma hospitals could not be established. Patients were operated upon in the presence of physicians and the most modern methods of treatment demonstrated. Throughout, the purpose has been to stimulate local interest in taking up the campaign to eradicate trachoma.

HOW TO GET A PUBLIC HEALTH NURSE

The employment of a public health nurse in Florida towns is, no doubt, a problem that the authorities and public spirited citizens have not been able to solve from a financial standpoint. The following press service bulletin issued by the North Carolina State Board of Health, tells of the unique method employed by the town of Fayetteville, N. C., in getting a public health nurse. Every city in Florida should have their own public health nurse, and the NOTES can recommend no better way for obtaining this service than was employed by the town of Fayetteville.

Fayetteville has recently shown other towns in the State how to secure a public health nurse. This was a question that had been agitating this town for several months, not that they were not all agreed on the need of a district nurse, but none saw from where her salary was to come. Finally, the magic plan of cooperation was hit upon, and the district nurse problem was soon solved. The churches, the fraternal orders, the mills and other firms and agencies got together and the result was a public health nurse was employed and put to work for a year. Mrs. Mack Davis, a graduate experienced health nurse, was the person elected to this position by the physicians of the town, and began her work March 1st.

The State Board of Health believes that cooperation on the part of all local agencies and industries of a town is probably the best plan by which any town or community may employ a nurse. It insures the nurse not only a competent salary, but affords her a support and a cooperation in her work she otherwise would not have. The Board believes further that this is a question which every town in the State will sooner or later be called on to settle, as the public health nurse has come to be as essential to a healthful, progressive city as a doctor or a lawyer.

THE BIOGRAPHY OF A FLY

By Miss Georgia Robertson, Chairman, Committee on Civics and Sanitation, Housekeepers' Alliance, Washington, D. C.

Once I was only a tiny, white, oval egg. My mother laid me with a hundred others in stable dirt. After a few days I hatched out, a little white worm. I fed for a week or two on the filth where I was, then I changed into a brown pupa. Several days later I burst forth a full-grown fly, with two gauzy wings.

Since then I have traveled about a good deal. My feet have a fine little fuzz on them; you cannot see it without a magnifying glass, but it is just splendid for catching germs of all kinds. They also cling to my wings.

You would not think so (I am so small), but I really can carry 6,000,000 bacteria on my body at once!

What kinds of bacteria? All kinds but especially typhoid fever and summer complaint, which kills so many young children and adults. You do not hear of summer complaint in winter; I am not flying around then, leaving the germs on the baby's bottle, or lighting on its lips, or falling into the milk, or feasting in the sugar bowl, or crawling over the dish towels hanging in the kitchen, or on the food there and in the pantry.

I also carry tuberculosis germs; in fact, I pick up a good many kinds of germs, for I love to flit about, lighting on filth of any kind I can find. Of course, having hatched out in it and lived on it the first part of my life, you could not expect me to do otherwise. But I also love to feast on candy, cake, sweets, meat, cheese and every kind of food.

I am really quite ancient, being one of the very few flies that lived over last winter. I hid myself in somebody's kitchen.

I cannot tell you anything about my descendants, but a very learned scientist said I might have 195,312,500,000,000,000 in one summer. So there is no danger of the fly crop failing, even though only a very few of us live through the winter.

If people cleaned us out of their houses, stores, markets and stables, while it is still cold, so we are stiff and inactive, and burned us up and then kept everything clean, so there was no filth, stable litter or decaying garbage for us to lay our eggs in, we would be starved out and disappear.

If stable refuse and street sweepings that we have laid our eggs in is carted away and piled up to decompose, we will hatch out there, and torment the farmer's cattle, so the cows will give less milk, and the horses will lose some of their vitality, having to fight us off all the time. We make it a lot harder for the horses every summer.

If you want to get rid of us the only way is to prevent us from having any breeding places, by keeping all stables refuse screened, or treating it thoroughly every little while with lime, to kill our eggs.

Some day people will become enlightened enough so they will clean everything up thoroughly early in the spring, brushing off every one of us that is clinging to the electric light cords and scale cords in the markets and groceries and from the walls. They will "swat" us without mercy until we disappear.

I suppose people would not like to have us leave fly specks on their candy, cake and bread, if they knew the specks were our excreta, and also that they might contain disease germs, but they do not seem to know it. They say, "Oh, it is just a fly speck!" They do not seem to care if their bread and cake is fly specked. They buy it in the market just the same when they see us crawling over it.

They think wrapped bread looks a little smaller, but by actual weight one baker's loaves were just the same, another's had about four mouthfuls less in the wrapped loaf. So people continue to buy the unwrapped bread. If they had watched us coming from human excreta and stable filth perhaps they would not be so willing to have us make a doormat of their food. But they never notice, so we swarm over the food in the markets and groceries and have access to many a highly respectable kitchen.

I came near losing my life this morning bathing in somebody's milk pitcher. I was afraid I was going to drown, but a kind-hearted lady lifted me out and poured the cream, with all those hundreds of bacteria I had left there, on her little girl's oatmeal. If she has typhoid fever I suppose her mother will wonder where she could have gotten it!

It was a sad day for us when Dr. Kober, of Washington, D. C. announced in 1895 that we were carriers of typhoid. He told the public how we crawled over excreta in the open closet (privy) vault, and then started for the kitchen table to wipe our feet laden with filth and bacteria on the beefsteak, or to take a morning bath in the milk pitcher, leaving hundreds of bacteria there in the milk, in which they grow and multiply more rapidly than anywhere else.

We had such a strenuous time in Washington, D. C. last summer. The traps were worse than submarines! The Gospel Mission at the suggestion of the Housekeepers' Alliance, gave work to the unemployed making fly traps. One of the leading newspapers bought 75 of them and gave them to the city. The Health Office gave orders to have them properly baited and cared for at the fish wharves, city markets, fire stations; etc. They trapped and destroyed us by the thousand!

By next summer I suppose we will not be safe anywhere for having been so successful with the municipal traps in the Capitol of the Nation, they will hear of it all over the country, and even the farmers will be using the big out of door traps around their stables where we always love to be, and where we find ideal breeding places.

We cannot live in a perfectly clean city, where there is no filth or rubbish of any kind for us to breed in, so we shall disappear from the scrupulously clean cities of the future.

Health Briefs

Open windows let in health.

Bad air and disease are closely related.

Good food and health go hand in hand.

"Night air" is filled with health. Open wide the windows at night and let it in.

The humble privy is like Pandora's box, however unclassical such a comparison may be. When left open it lets out diseases.

Plant life is sustained largely by air. When not given air and sunlight the plant soon dies. This applies also to animal life. If not given fresh air and sunlight man dies prematurely.

Clean up the yard. Buy a good garbage can and every day place all refuse in this receptacle. Take pride in being neat and systematic. If everyone kept one's yard in a clean condition, towns would need no yearly "clean-up" campaigns.

If each individual in Florida would practice the principles of hygiene and sanitation, the death rate would be reduced one-half, the wealth of the State would more than double, and Florida would have a world-wide reputation as being the healthiest spot on earth.

Human energy produces wealth. The inherent power of production of one person may be greater than that of another, but the producing power of all persons is reduced, and often stopped altogether, by disease. It is the object of health boards to maintain at its maximum efficiency the producing power of the public, and to conserve it by lengthening life.

Unless fly traps are used to capture the flies as they emerge from their breeding places, such measures are ordinarily only excuses for failing to observe the more important cleaning-up process; the entrapped flies have ordinarily already had ample opportunity to carry filth and germs and deposit their eggs. However, traps may be useful adjuncts to other more permanent corrective measures—the more flies captured the better—but the trapping should begin early in the spring in order to capture the early flies which are responsible for the later multiplied millions of the same species. Many good fly traps are on the market and these may be baited with milk-soaked bread, the juice of crabs, stale beer, etc.—*From Flies—Their Habits and Control, Bulletin California State Board of Health.*

Correspondence

SEWAGE DISPOSAL FOR SMALL TOWNS

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: Will you please advise me if the Health Department has adopted and approved any set design or standard of surface closets and septic tanks and sewer systems in small towns that are unable to install and maintain regular sanitary underground sewer systems? If you have not such information can you advise me where I can secure data along these lines?

Respectfully,

Jacksonville, Fla., March 25th, 1916.

Dear Sir: In reply to your letter of the 23rd relative to the standard for the construction of surface closets, etc., am mailing you under separate cover a copy of the August 1915 Health Notes, upon page 244 of which you will find resolutions adopted by the State Board of Health covering plans recommended and approved by the Board for the construction of surface privies, at public school buildings. The same will apply to buildings constructed for private use. Publications 99 and 147 describing in further detail the construction of such outhouses are also being mailed you, and another small pamphlet descriptive of an Imhoff tank for use of a single dwelling will be sent you as soon as this publication is completed. All of these booklets deal with the individual residence rather than with the municipality itself, and I am also enclosing therefore, publication 117 in the event that your town should consider the installation of a municipal plant.

Trusting this literature will be of value to you, I am,

Very truly yours,

(Signed) Joseph Y. Porter, State Health Officer.

ABOUT MALARIA IN FLORIDA

Reading, Pa., Feb. 21st, 1916.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: I am sending herewith a card from a gentleman who called at this office this morning and is desirous of locating at Daytona. Someone has put a mistaken idea into his head about Malaria. He was informed that I had put many years in Florida and called to verify the above opinion. My advice to him was the opposite, telling him that in eight years' experience there I had never seen a case of it. However, you with the facilities of the State Board can send him some pamphlets about climate and health, particularly about the east coast.

This morning it is 10 above here—clear and bright with snow on ground. Looking out the window, Key West would look good with a good crawfish in sight for dinner.

Trusting this finds you well, I am,

Yours very truly,

Jacksonville, Fla., February 28, 1916.

Dear Sir: At the request of ———, of your city, I am sending you, under separate cover, publication No. 105, on the subject of malaria. In this connection you are advised that malaria is a preventable disease, preventable by effective screening. From all available reports and statistics, it would seem that malaria is on the decline in Florida. The disease, however, has never been more prevalent than in any other of the Southern States. On account of the warm climate of Florida, many ills and "rundown" feelings, which in other parts of the country would probably be called by some other name, are in this state pronounced malaria by the individual's own diagnosis; when their blood is examined for this disease, under the microscope, only six per cent of approximately six thousand specimens which were examined in 1914 were found to be positive for malaria.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

LAWS RELATING TO SCREENS SHOULD BE RIGIDLY ENFORCED

Some steps should be taken by the city authorities to see that the laws are enforced, relative to screening. It does not require any great degree of sagacity or penetration, to see that these laws are not being enforced in Pensacola today. On the contrary their violation is of such a flagrant character as to make the ordinance governing this matter entirely ineffective.

The summer months are approaching and the flies are becoming more and more prolific. Your life or the lives of your little ones may depend upon the enforcement of the screening ordinance by the officers whose duty it is to protect the citizens of the community through this enforcement.

Again and again it is reported that the places which should be screened, and according to law must be screened to operate, are doing business day after day, with the screen doors ajar and sometimes the entire screening opened for the ingress of hundreds of flies and other insects.

The time to take steps for the enforcement of this law is now. And the matter should not be allowed to rest for a single day. Violators of the law should be fined for every offense, and if the misdemeanors are continually repeated, as they are in many cases, then more adequate punishment should be inflicted.

The health of the community this summer depends very largely on the people of the community. Not only are the officers responsible, but each householder should make every effort to keep his premises clean, and to have his residence screened from flies and mosquitoes. There is no time better than the present for this work, and every Pensacolian should make an effort to help in the campaign to eradicate the city of flies and mosquitoes.—Pensacola Journal.

STATE HEALTH TRAIN

The Florida State Board of Health educational exhibit train arrived in New Smyrna Sunday and was opened to the public Sunday afternoon and all day Monday. During that time the exhibit train was visited by hundreds of people and the pupils of the public school were given an opportunity to learn much from the exhibits by being dismissed from school early Monday afternoon. The "train" is made up of three Pullman cars and the exhibits are so arranged that all persons may easily understand the fundamental principles of health preservation and disease prevention.

With the establishing of this "health train" the State of Florida has taken a step in advance of other states in bringing directly to the people methods of disease prevention and teaching them how easy it is to preserve the health of any community.

Car number one, the living car for the accommodation of the representatives of the State Board, contains the office in the observation end, four staterooms, bath and toilets, dining room and kitchen. Like the other cars of the train, it is heated with electricity generated by a dynamo in car number two, and like the others it is carefully screened and ventilated.

Car number two contains in one end the dynamo, driven by a gasoline engine, and the sleeping quarters for the special train crew. The larger part of the car is devoted to the installation of various models, as that illustrating the Imhoff sewage disposal system, another showing how water in driven or open wells is contaminated by drainage from stable, out-house and polluted surface water. A miniature model shows a dipping vat for ridding cattle of the tick. A model dairy is illustrated in the same manner; the proper feeding and clothing of babies and the open-air treatment of tuberculosis and many other practical questions of sanitation and disease prevention are similarly illustrated.

This car is also fitted with a stereomograph with a capacity of 104 lantern slides, and this is lighted and operated automatically by electricity generated in the car itself.

Car number three is divided through most of its length by a partition, on which are displayed 36 panels. These carry in graphically worded sentences warnings and advice on sanitary subjects and disease prevention. Numerous electrically operated models and a large stereomograph, similar to that in car number two, are also arranged to splendid advantage in this part of the train.

In this car will be installed an expensive and elaborate contribution from the Florida Dental Society, which will show various diseases of the teeth, and the proper attention that should be given to them. In this car is gathered much of the equipment that has special significance in sanitation.

A complete inventory of the educational equipment of these cars is unnecessary. The train with all its invaluable contents is to be brought within the reach of every person in Florida who can go to the nearest railroad station, and it will be taken wherever rails are laid on which it may run. It is to be permanent, a perpetual traveling school, illustrating forcefully and graphically how better health conditions, better sanitation and better living may be brought to every Floridian. When it has carried to every part of the state its object lessons, the journey will be repeated, with newer models and the later discoveries of medical science.

It is absolutely free to all who will accept what it offers, what it will bring to all; it is without cost to those who will listen to those who are prepared to explain and advise; to those who will read the panels and watch the moving pictures and lantern slides.—New Smyrna News.

FLORIDIANS SHOULD WORK FOR HEALTH OF THE STATE

Why are not the people of Florida, the men and women who have been fortunately placed in life, where they may, if they will, do something worth while for the sanitary elevation of their respective communities—why are not such men and women willing to undertake such work? The query applies not alone to the people of this state—it has a meaning for all states and communities.

Life is a serious matter, after all, but the serious side is not continuously forced upon the attention of those in homes of elegance even of moderate comfort. Suffering comes to all at one time or another, but to some it is an always present spectre. Most of the blindness in the United States is the result of ignorance of those who assist the newborn child into the world. A large share of the disease that increases the community death rate, starts in the insanitary surroundings, insanitary because of ignorance.

If you are willing unselfishly to do your part to lessen such conditions, if any part of your time or your money is available for such work, there are a hundred opportunities and there are those who can show you where these opportunities lie.

Florida and many communities in Florida are blessed with men and women who are doing this work unselfishly, unobtrusively, without hope of reward, but they are few and lonely. They are the men and women who have studied through personal contact the needs of the other half, whose interest has been aroused to the fighting point by what they have seen and known, and they are working all the more earnestly because, they are working intelligently—they know what they are doing and their efforts and their money are being put where they will get the best and largest results for every minute and every cent expended.—Pensacola Journal.

Veterinary Notes

TICK ERADICATION

Several hundred years ago Spaniards landed in Florida at St. Augustine, bringing with them their cattle. These cattle were infested with a tick which still remains in the State and which has spread to her remotest confines. Tick-infested cattle were also brought into the United States from Mexico into the State of Texas, and from Texas and Florida this pest has spread all over the South, as far north as they could live through the winter. So that by the year 1885 the area proclaimed as tick-infested, by the Federal Government, after an inspection made during the years 1883-84 and '85, by the late Dr. D. E. Salmon, was 741,515 square miles, located in Virginia, Kentucky, North Carolina, Tennessee, South Carolina, Georgia, Florida, Alabama, Mississippi, Missouri, Arkansas, Louisiana, Oklahoma, Texas and California.

It had been known for a long time that Southern tick-infested cattle spread a fatal disease among Northern cattle although they themselves seemed in a fair state of health. This fact was mentioned as early as 1796 by a Dr. Pease, who observed an outbreak of fatal fever in cattle, in Lancaster County, Pennsylvania, following the passage of a herd of cattle driven through from South Carolina.

In 1868, it was noted that Texas cattle shipped by boat up the Mississippi river to Cairo and into the State of Illinois, and Indiana, early in June, caused enormous losses in cattle in those states.

Cattlemen in the Eastern States also became alarmed because it was noted that these cattle shipped to the New York stock yards were also dying and it was feared by the New York health authorities that human health might be placed in jeopardy.

In the literature, we next read of Texas Cattle Fever in the Annual Reports of the Bureau of Animal Industry for 1883-'84 and '85, in which years the northern limit of the cow tick was defined by the late Dr. D. E. Salmon, of the Bureau of Animal Industry.

It was long known that this peculiar fever did not exist where the cow tick was unknown. This was empirical knowledge, and it was not until 1889 that Drs. Theobald Smith and F. L. Kilborne, of the same government bureau, established beyond a doubt that when young cattle ticks are placed upon cattle there develops a high fever accompanied by great loss of blood corpuscles. These experiments were repeated in 1891 and 1892, with the same confirmatory results.

Before these years, however, Dr. Smith read a paper, in 1889, before the American Public Health Association, at its meeting in Brooklyn, in which he described a peculiar micro-organism as occurring in the red blood corpuscles of cattle suffering from this peculiar fever, in tick-infested cattle, and claimed that this peculiar germ was carried from cow to cow by the common tick, this being the first instance in the history of medicine where it was proved by scientific experimentation that a disease can be insect-borne.

The idea of exterminating or eradicating the cow tick was first conceived by Dr. Cooper Curtice, a zoologist in the Bureau of Animal Industry. He it was who first studied the life-history of the cow tick and found out that only a part of the development of the tick takes place on cattle, and that the remainder occurs on the ground. He discovered that ticks get on cattle, as seed ticks, or larval ticks. These larval or seed-ticks shed their skins twice on the cattle, developing into males and females with four pairs of legs, while in the seed-tick stage, they only had three pairs of legs. The male tick remains quite small while the female increases enormously in size from becoming engorged with blood. When fully engorged, she drops to the ground and at once begins a search for suitable place to lay her eggs. During this search, although she only crawls a few feet, she is subject to many enemies that may destroy her, such as ants, unfavorable weather

conditions such as excessive heat, dryness, or moisture. Thousands upon thousands of ticks are destroyed in this way, and is the explanation of why ticks are more plentiful at some seasons than at others.

Egg-laying may begin in two days after the female drops to the ground or it may be deferred to twenty days, according to temperature conditions. The eggs are about 1/50 of an inch long, of light, amber color and are covered with a gelatinous substance which causes them to adhere to one another, in clusters. As these eggs are laid, the mother tick gradually shrinks in size and dies at the end of the egg-laying period, which consumes from four days in summer to one hundred days in winter, the number laid being from a few hundred to five thousand.

These eggs begin to hatch out in a few days in summer, but require a longer time fall and winter. From each egg there issues a six-legged, seed tick or larva, which while very active does not crawl any considerable distance laterally. It prefers ascending blades of grass where it may be found in great numbers, waiting for cattle to come by. If cattle, horses or mules do not come along and give them a chance to attach themselves they die of starvation, in four to eight months, according to conditions, because they can only subsist on the blood of such animals.

When the tick attaches itself to cattle it is a baby tick. It is sexually immature. When attached, it at once begins to draw blood and inoculate the animal with the germ of Texas fever, with which it is itself contaminated. In about a week it sheds its skin, or moults, changes its color from brown to white, has grown another pair of legs and is now called a nymph. In another week the nymph sheds its skin and becomes either a male or a female. The male is about one-tenth of an inch long, and does not increase in size, is very active, and may be seen running over the animal, while the female is larger, much less active and shows a tendency to remain more or less at the original place of attachment. After mating with the male she rapidly fills with blood and in three weeks has matured her eggs, filled herself with blood and is ready to drop to the ground to lay her eggs, and die, this completing the cycle of development. It will be seen now that if we interfere with this cycle of development every two weeks by dipping cattle in an insecticide solution the female ticks will be killed before they have had time to drop off and lay their eggs and the crop of ticks on the animal and their offspring have been exterminated. When this process of extermination is kept up for a sufficient length of time, we shall have destroyed all the females of the various generations, and therefore the whole race will have been eradicated. This happy result can be attained by dipping all cattle every two weeks over a period of five months, in the warmer months, when the ticks are developing on schedule time.

TEXAS OR TICK FEVER

Texas Fever is known under a variety of names among which may be mentioned, Southern cattle fever, Tick fever, Spanish fever, Splenic apoplexy, Splenic fever, Red-water, Bloody murrain, Pasture poisoning, Acclimation fever, Town cow disease, Hollow tail, Hollow horn. The name Texas fever has clung to the disease because it was first noted that cattle from Texas caused the disease when driven or transported to other sections. The disease is found not only in all that part of the United States known as the South and Southwest, but also in the West Indies, South Africa, Australia, the Danube basin in Europe, Roumania, South Russia, South America, Central America and Mexico.

So far as is known, Texas fever is found affecting only the bovine animals, being most fatal to adults. The cattle tick is found on horses and mules, but is not capable of infecting them with the germ of the disease it produces in cattle.

Previous to the researches of Smith it was a most mysterious disease as indicated by a letter by Dr. D. E. Salmon transmitting a report of the investigations made in the Bureau of Animal Industry by Smith and others. Salmon said: "In the whole list of diseases affecting domesticated animals, there is none so peculiar in its character or so mysterious in its phenomena, as was this one, previous to these researches. The dissemination of the

deadly contagion by apparently healthy cattle, and the harmlessness, in general, of the really sick animals were inexplicable by any facts which were furnished by the study of other diseases. Veterinarians who had not had an opportunity to observe this disease were skeptical in regard to the correctness of such conclusions, and some spoke of them as a 'romance in pathology.'

"These early observations have not only been confirmed, but the phenomena have been explained and our knowledge placed upon a scientific basis."

TWO FORMS OF TICK FEVER

Texas or Tick Fever is a disease of the blood and occurs in two forms, the acute and the chronic.

The chronic form is that which is present in all Southern animals that have been raised on ticky pastures and manifests itself in the general unthrifty conditions so noticeable in Southern cattle. Its degree of severity and effects upon the animal are largely due to the number of ticks present and character of the food. When animals are not well cared for, many die of this form, while if they are well fed and housed on cold nights, and are not allowed to become severely infested with ticks, they do fairly well and rarely die from the chronic form. This is the form best known to cattlemen, and on account of its insidiousness the owner fails to realize the great damage being done his cattle.

The acute form is so entirely unlike the chronic form in its manifestations that cattlemen frequently mistake it for another disease. It is of short duration, swift and sure in its action and frequently 90 per cent of the affected animals die within two weeks. If all tick fever occurred in the acute form, there would be no trouble in convincing the cattleman of the great value of tick eradication; because, he would either have to clean his cattle and range of ticks, or go out of the business.

In the acute form, there is a fever which may be as high as 108 degrees F., and which sets in about a week after the animal has become infested with the tick a first time. During the first two or three days the temperature will be high in the evening; then the morning temperature will gradually rise and the fever remain permanent for seven or eight days, when the animal either dies, or recovery begins. In either case, the fall of the temperature to normal, or even below normal, is as sudden as was the onset. The respirations are increased from twenty, the normal, to sixty or seventy, and the pulse from sixty to one hundred per minute. There is complete loss of appetite, and rapid loss of flesh. In most cases that terminate fatally, the urine is wine-colored or blackish, from the blood coloring matter it contains; a condition which has given the disease the names red-water and black-water. While the fever is high, the bowels are usually constipated; but when the fever subsides, a diarrhoea may set in, the feces being of a golden-yellow color. During the high fever there is some loss of vision, delirium and staggering gait. Relapses occur frequently; but are milder in character than the first attack.

MOST IMPORTANT DISEASE IN THE SOUTH

It will be seen from the foregoing that tick fever is one of the most important of all cattle diseases, and that it is the most important cattle disease in the South, and especially in Florida, where there are fewer animal diseases than in any other state. The importance of tick fever comes, not altogether from the fact that it kills so many cattle; but also from the fact that it prevents improvement of breeds by killing breeding stock brought into the South from the North and West.

ORIGINATOR OF TICK-ERADICATION

In 1899, Dr. Cooper Curtice who had worked out the life history of the cattle tick, and who was at that time State Veterinarian of North Carolina, conceived the idea that the cow tick could, by having its life cycle interrupted by destroying the engorged females before they were ready to drop off

cattle, be entirely exterminated. He presented his plan to the Commissioner of Agriculture of North Carolina and began in a small way to carry out his ideas. He had little or no money to work with, so began by simply hand-picking, or oiling a few cattle on farms here and there and preventing a reinfestation of the pastures by cattle that might be freshly introduced. He had the satisfaction of knowing in a few months his efforts were crowned with success. If, as he had shown, ticks could be eradicated by such simple methods from a single farm, a whole county could be cleaned of them, and likewise a whole state, and finally all the United States. Cur-tice's work now began to attract not only the attention of all the Southern States, but of the Federal Government as well, and by 1906, or in seven years, twelve counties in North Carolina had been cleaned of the tick, and were released from quarantine.

In 1907, the Federal Government recognized the importance and feasibility of tick eradication by appropriating \$82,500.00, increasing this to \$150,000.00 in 1908, and to \$250,000.00 for several years thereafter, and now to a much higher figure. This money is used in aiding states to maintain inspection, quarantine, supervision of vat construction, dipping and spraying cattle, and general supervisory office work. No money is spent by the Federal government in building or maintaining dipping vats. This expense is met by the state, county and private individuals.

WHAT TICKS COST

There are probably at least a million head of cattle in Florida and these are worth twelve million dollars.

Three per cent of them die from the direct and indirect effects of tick fever. The loss from deaths alone is, therefore, \$360,000.00. Furthermore tick-bitten hides are worth \$1.25 less than Northern or Western hides, because they do not make good leather.

Florida cattle sell for less per pound, no matter what their quality than do cattle from tick-free areas. The difference usually being from 1½ to 2½ cents per pound, on the Northern markets. Tick-infested cows produce fewer calves, the loss here being considerable, probably ten per cent.

The dairyman's loss from ticks is from two direct sources, viz: lessened milk yield and deaths from tick fever. A heavy milker, heavily infested with ticks will lose a quart of milk per day. The estimate that the whole South loses, in milk alone, \$800,000.00 a year, is probably not too high. Another estimate is that the total loss to the Southern dairyman is about \$8,500,000.00. It is figured in this way. When a dairyman tries to improve his herd by the introduction of better milkers, he loses ten per cent of these imported cattle even if they are immunized against tick fever, and sixty per cent if they are not so immunized. Also it must be taken into consideration these imported cattle are usually high-priced, and, in some instances a valuable strain of animal that can not be replaced, dies, and such loss should also be charged up to the tick. About 4,600 such cattle are brought south each year. If ten per cent die, and they cost anywhere between one hundred to one thousand dollars per head, the loss is between \$46,000.00 and \$460,000.00. The loss alone to the dairy industry of the South from deaths and from shrinkage in the milk is therefore about \$8,500,000.00 annually; a sum that would be sufficient to entirely eradicate the pest from the whole tick-infested South. The total loss to the cattle industry, including the beef and dairy business, in the whole South, is estimated at from \$50,000,000.00 to \$100,000,000.00 annually. We may reasonably ask if there is any industry that could prosper with such a terrible handicap. Outside these estimated losses from deaths, shrinkage of milk, decrease in value of hides, smaller market prices, etc., there are other distinct losses that can hardly be computed; such as depression of all agricultural pursuits; prevention of immigration; and driving the boy and girl away from the farm to other pursuits, that are not as healthful, profitable or enjoyable as a successful farm life, because without good cattle and other live stock farming is not attractive, and a successful agriculture has never existed.

HOW THE TICK MENACE CAN BE AND IS BEING REMOVED

After a careful consideration of the baneful influence of the tick and of the ease with which it can be destroyed, it is strange that the people do not rise in their might and demand that this pest be exterminated, at once; because nothing is simpler.

The extermination of this insect is one of the easiest, big things imaginable, if we go about it in a methodical way. The tick is an insect and like all other animal and vegetable life, develops according to a natural law, hence, if we take advantage of our knowledge of the life-history of the cow tick, nothing is simpler or easier than its extermination by interrupting its life cycle, by destroying the females before they have laid their eggs and by destroying the young ticks before they have developed to the egg-laying stage. This is accomplished in two ways. First, we can destroy all ticks on a pasture by fencing it and keeping it free of cattle, horses and mules for four or five months. Second, we can destroy all ticks on the animals by dipping them, the dipping vat filled with the proper strength arsenic solution. These dipped cattle may be turned back upon the ticky pasture, and will, of course, become re-infested with young ticks. If these same cattle be dipped again, within two weeks, the ticks on the cattle will not have had time to develop to the egg-laying stage and will be killed by the dip. They are again turned out on the same pasture and, of course, will get more ticks on them, which will, in turn, be killed by dipping the animals again within two weeks. If this process of dipping the cattle grazing on a ticky pasture be repeated every two weeks, it will be found at the end of four or five months, or after the fifteenth dipping, there will be no more ticks on the cattle or pasture either; because all that got on the cattle have been killed by dipping, and the seed ticks that did not get on an animal, have starved, and, therefore, could not reproduce their kind because they can not develop from the baby stage to the adult tick, except upon an animal.

PASTURE ROTATION METHOD

There is another method of eradicating ticks without dipping. This consists in dividing the pasture into different lots and is known as the pasture rotation method. The cattle are kept in one pasture for a sufficient length of time to allow all ticks of the same generation to drop off. The cattle are then removed to an adjoining pasture and kept there long enough to develop the next generation to the dropping-off period. This removal to fresh pastures is repeated four or five times when it will be found that all the ticks have developed and dropped off. If they have not become accidentally re-infected, meanwhile, the cattle will be tick-free. This period required for these operations would be four or five months. By the end of this time the cattle may be returned to the original pasture, which by this time is also tick-free because the young ticks which hatched from the eggs laid by the ticks that dropped from the cattle have starved. This method should be applicable to Florida range conditions, is the most scientific method, and its great advantage lies in not having to gather and handle the cattle, as in the dipping vat method.

THE SPRAYING AND PICKING METHOD

Ticks may also be eradicated by spraying and even by hand-picking. These methods are applicable to cases where there are only a few animals and where no dipping vat is handy as it would not pay to build a vat for dipping a few animals. By picking off every large tick and destroying it the family cow, kept in the yard, and away from other cattle, not so treated, can be effectually freed of ticks, as will also the lot she stays in. The same result can be obtained by spraying the animals thoroughly once every two weeks over a period of four or five months.

WHAT THE STATES ARE DOING

Tick eradication as has already been stated, was first practiced in North Carolina in 1899, which State, had, by 1906, entirely destroyed the tick in twelve counties. The work has been pushed more or less vigorously in all the infested states, since 1906, when the Federal Government made its first appropriation of \$82,500.00. Florida, the last State to begin work, cleaned up two counties, Broward and Dade, in 1915, and inspected the lower part of Palm Beach County. As no ticks were found there this naturally-free area will be released from quarantine also, shortly. There are about five thousand square miles of territory in this free area. On December 1, 1915, areas amounting in the aggregate to 12,313 square miles, situated in the States of Alabama, Arkansas, Louisiana, Mississippi, North Carolina and Virginia were freed from the tick. The total area cleaned of ticks in 1915 was about 50,000 square miles, which is the largest area cleaned in any one year since the work was established in 1906. At that time there were 741,575 square miles under quarantine. There are now 465,733 square miles under quarantine; so that more than one-third of the originally-infested area has been cleaned of the pest. The great advantages of tick eradication becomes apparent since it has been demonstrated many times that cattle sell for from \$7.00 to \$10.00 more per head when they originate in a tick-free area. One county in Alabama that had been freed of the tick shipped out 1,700 head of cattle, and they brought \$10.00 more per head than similar cattle from a ticky county. The cost of freeing this county of ticks was 55 cents per head of cattle.

Tick eradication is a work of the people themselves. Governments can not do the work, but governments can help the people by directing, enforcing quarantine, and furnishing leaders. In all counties where it is proposed, to take up the work, the question should be submitted to the voters. The county officials would then feel free, in case the question carried, to vote county funds for carrying on the work. The State government would also be in a position to consider what part it should take in helping the county. The Federal Government would also then be warranted in assuming its share of the expense.

THE DIPPING VAT

This facility which has cut so large a figure in tick eradication operations consists essentially of a concrete tank built into the ground. It is twenty-four feet long, three feet wide at the top, and a foot and a half wide at the bottom, and six feet, six inches deep, with walls six inches thick. The deep part of the vat is twelve feet long and the bottom then becomes an inclined plane up which the animals climb to emerge from the vat. At the entrance end there is a slide built at an angle of sixty degrees on which the animals slip into the vat. The vat is filled to a depth of five feet three inches, with the dip.

THE DIP

This consists of a solution of arsenic, soda and pine tar, and must contain not less than 0.18 per cent arsenic for ordinary tick eradication work, nor more than 0.25 per cent arsenic for interstate shipments.

FORMULA FOR THE DIP, ITS COST

Assuming the vat is of regulation dimensions, it holds about 1,500 gallons when filled to the required depth of five feet three inches. To fill such vat the following chemicals would be required:

30 lbs. of white arsenic at 8 cents.....	\$2.40
12-lb. can of caustic soda at 16 cents.....	1.92
2¼-lb. can of caustic soda at 16 cents.....	.36
30 lbs. of sal soda at 2½ cents.....	.75
3 gals. tar and can.....	1.60

Total.....\$7.03

MAKING THE DIP

The Arsenic Stock

Empty the 12-lb. can of caustic soda into a 15-gallon iron pot or wash tub. Add three gallons of cold water and stir. As soon as dissolved add the 30 pounds of arsenic, slowly, at the rate of a pound or two at a time, stirring constantly. It may require a little heat to get all the arsenic dissolved; but do not apply heat until it seems necessary. When the arsenic is dissolved add the 30 pounds of sal soda, in the same manner. A little more water added now will hasten the solution of the sal soda. When dissolved add enough water to make the total volume 15 gallons. This is to be diluted 100 times, and is enough to fill the vat.

The Tar Stock

Place the $2\frac{1}{4}$ lbs. of caustic soda in a similar pot and add three quarts of water. When dissolved and cooled some, add the three gallons of tar, and stir thoroughly.

In filling the vat add three or four volumes of water to the tar and stir. When the vat is three-quarters full of water, add the tar solution and stir. When the vat is filled to the 5-foot, 3-inch water line, add the 15 gallons of arsenic concentrate and mix thoroughly, and the vat is ready for use.

DIPPING CATTLE

Dipping the cattle or forcing them to enter the vat is a very simple matter if the entrance chute and pen leading thereto have been properly constructed. The entrance chute should be thirty inches wide, in the clear, with the planks on the inside, and about 40 feet long. At the end it should flare out into a V-shape so that animals can be crowded into the chute which is narrow and prevents animals from getting hung or trying to turn around. In this way, by a little prodding those in the rear will force the first one to leap into the vat head foremost. When everything is going well, they thus jump in one at a time and the work proceeds in a regular and orderly manner, it requiring about a half minute for an animal to pass through the vat. Emerging from the vat the animal goes into the dripping pen where the surplus solution drains off and flows back into the vat. The animal brings out about a gallon of dip, and all drains off, in about five minutes, except about a quart.

PRECAUTIONS IN DIPPING

Animals should not be dipped when overheated from being driven to the vat or from other causes. The animals should be watered before being dipped as they may drink the dip. While an animal may drink a few swallows without danger, the dip is not made for this purpose. Water is more wholesome and is cheaper. On no account must animals be dipped during a rain, unless they can be housed immediately upon emerging from the vat.

Animals should not be turned out upon pasture until they have dried off, as the arsenic may fall upon grass and poison the cattle. Animals that are evidently too weak to swim should not be dipped. If ticky, they should be sprayed or washed down with some of the dip. Heavily pregnant animals should be accorded the same treatment. The dip should be tested every month or so for arsenic content, as the arsenic is decomposed by two species of bacteria. The oftener it is used the sooner will it require replenishing. The State Board of Health will make this test, and advise you, free of charge.

If you wish to eradicate ticks dip every two weeks. If you are merely controlling ticks dip once a month. In the first case you will secure maximum results, and in the latter partial results.

INTRASTATE SHIPMENTS OF CATTLE

At the present time there is no regulation concerning the shipment of cattle from one Florida county to another Florida county, that is, cattle may move without restrictions between any counties in the state with the following exceptions, the lower part of Palm Beach County, all of Broward County and all of Dade County have been freed of the cattle tick by the State Board of Health, the Federal Government and the County governments, and no cattle can be permitted to enter this area except upon written authority of the State Board of Health, which is only given when certain conditions have been complied with. If cattle are ticky they must be dipped twice within two weeks and shipped in disinfected cars—when destined to this tick-free area. When certain facilities are provided at Jacksonville, an intending settler may dip his cattle at a nearby vat and ship same to Jacksonville within two weeks where they will be again dipped under State Board of Health supervision and loaded through properly-equipped pens and chutes into a disinfected car and forwarded to destination within forty-eight hours after arrival in Jacksonville.

INTERSTATE SHIPMENTS OF CATTLE

No ticky cattle can be shipped out of the State of Florida except they be for immediate slaughter upon arrival at a slaughtering center having facilities for handling southern or quarantined cattle. Even in this case, they must be routed through points where they can be fed, watered and rested in special feeding pens set aside for the reception of ticky cattle. Cattle for all other purposes must be dipped twice before they leave the quarantined area. The first dipping may be done anywhere, under State supervision, and the animals must be forwarded within twelve days to a more northern vat where they will be dipped under Federal supervision and shipped out in disinfected cars to any point in the United States, without further inspection.

All the foregoing shows in a very superficial way what the South is paying for allowing the cattle tick to exist.

Summary of Public Health Administration, February

SOUTHWESTERN DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Differential diagnosis supposed smallpox case Jackson St. Conference with Mayor on Screening law. Conference with councilmen in regard to Screening law. Interview with grocers in regard to Screening law. Inspections by Sanitary Patrolman (violation of sanitary laws ordered abated): Screening Law—restaurants 3, lunch counters 3, dining or buffet cars 2, meat shops 3, grocery stores 11, bakeries 1, fruit stands, 34, ice cream wagon 1. Surface Closet and Water Carriage Laws—private residences 15. Sanitary Nuisance Laws—cigar factory 1. Other laws under jurisdiction of State Board of Health—miscellaneous 10, fruit peddlers 22. Communicable Diseases—typhoid fever 8, tuberculosis 2, scarlet fever 2, diphtheria 6; fumigations, releases, etc., 14.

Seffner: Investigation outbreak of smallpox.

Wimauma: Investigation pellagra and dysentery cases.

West Tampa: Conference with Mayor in regard to Screening Law.

Port Tampa: Conference with authorities in regard to Screening Law.

Winter Haven: Investigation of reported sanitary nuisance.

WESTERN DISTRICT

Pensacola: Routine work, Acting Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections by Sanitary Patrolman as follows (violations of sanitary laws ordered abated): Screening Law—lunch counters, 3, meat shops 3, grocery stores 2, fruit stands 10. Surface Closet and Water Carriage Laws—private residences 15. Communicable Diseases—typhoid fever 7, tuberculosis 3, scarlet fever 2; fumigations, releases, etc., 10.

SOUTH TROPIC DISTRICT

Key West: Routine work, office of Assistant to the State Health Officer. Assistance on educational health exhibit train through district. Inspection and test of water supply of schools; instructions issued how to render water safe. Inspection of school children returning to school after attack of scarlet fever. Inspection of toilets in private school; recommendations made for improvement. Case suspicious bubonic plague investigated. Guinea pigs inoculated, and fluid from gland examined; both negative. Case diagnosed as probable Malta fever seen. Culture of *micrococcus militensis* obtained from Hygienic Laboratory and agglutination tests carried out; negative. Blood cultures made two occasions and an organism not *micrococcus militensis* obtained; culture forwarded to Central Laboratory for identification. Management of communicable diseases and supervision of inspections by sanitary patrolman. Routine laboratory work.

SOUTH CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer. Consultation with attending physician regarding two cases chickenpox. Sanitary investigation of proposed establishment of negro cemetery. Diagnosis of erythema, scarlet in form, made of suspicious case scarlet fever at request of attending physician. Investigation several cases resembling dysentery.

Altamonte Springs: Investigation of source of infection of two cases of typhoid fever.

CENTRAL DISTRICT

Gainesville: Routine work, office of Assistant to the State Health Officer. Inspection of surface privies of negro school; recommendation to city council to extend sewer to take in school acted upon favorably. Conference with city engineer and chairman sanitary committee of council regarding sewer extension.

Alachua, High Springs, Newberry, Archer, Micanopy, Hawthorne, Waldo: Series of lectures to high school students on Hygiene.

Carbur: Investigation reported smallpox; diagnosis of chickenpox made.

Jacksonville: Conference regarding health work in Central District.

Cross City: Hookworm: treatment of 16 school children.

Fairbanks: Two cases typhoid; screening of patients with other usual precautions.

High Springs: Conference with city officials regarding vital statistics; model ordinance proposed for passage next meeting.

Micanopy: Typhoid. Vaccination of nurse. Usual methods of control.

EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer. Conference with City Manager relative to sanitary conditions of city jail.

Ft. Pierce: Conference with local physicians and city attorney relative to enforcement of new health ordinance.

Ft. Pierce, Vero, Fellsmere, Sebastian, Melbourne, Eau Gallie and other towns: On duty continuously on educational health exhibit train; stops at principal places along Florida East Coast R. R. and its branches from Ft. Pierce to Daytona.

Jacksonville: Conference regarding public health administration in East Coast District.

WEST CENTRAL DISTRICT

Tallahassee: (Office vacant).

SPECIAL DETAILS

Tarpon Springs: Address before Farmers' Institute on "Sanitation."

Lakeland: Investigation of an epidemic of dysentery. Study of epidemiological data and inspection of ice, water, milk and raw food supplies. Visit of cases with attending physicians. Report rendered with recommendations.

Lake Wales: Sanitary survey of town with an inspection of all alleged nuisances. Report with suggestions for betterment of the local sanitation.

Knights: Inspection at request of owner of newly constructed slaughter pen. Visit of case suspected pellagra with attending physician.

Mulberry: Consultation with local physician regarding some nuisances in a rural section and the methods for control of the same. Epidemic of rural dysentery.

Keysville: Inspection of school buildings and assisting with the examination of pupils.

Tampa: Consultation with bacteriologists and submission of specimens.

Plant City: Routine duties and correspondence. Campaign for better milk and numerous conferences regarding the same. Examination of specimens. Assisting examining physician with inspection of school children. Examination of city water.

Sydney: Examination of suspected case of diphtheria with attending physician.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Places visited during February: West Palm Beach, Jupiter, Hobe Sound, Stuart, Jensen, Walton, Ft. Pierce, Vero, Fellsmere, Sebastian, Hopkins, Melbourne, Eau Gallie, Cocoa, Titusville, Maytown, Chuluota, Geneva,

Okeechobee, Kenansville, Oak Hill, Lake Helen, Orange City, New Smyrna, Port Orange, Daytona, Ormond, Bunnell, Palatka, Hastings, Jacksonville.

Total number towns visited in 1916 to March 1..... 53

PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes," Vol. XI, No. 2, February, 1916, pp. 32.

Press service bulletins to Florida newspapers: February 2, "Disease Prevention Easy in Florida;" February 9, "Cooking;" February 16, "District Nursing;" February 23, "Physical Preparedness."

Publications out in February: None.

Distribution of literature during February:

Number pieces distributed on request.....	2,681
Health Notes, February, mailing list.....	8,925
Press service bulletins to newspapers, 4 issues.....	1,100

Total	12,706
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Total number pieces literature distributed in 1916 to March 1.....	32,432
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SMALLPOX

Reported cases of smallpox in Florida, February:

Central (Marion Co.)	5
Greenville (Madison Co.)	2
Key West (Monroe Co.)	1
Ocala (Marion Co.)	1
Wauchula (DeSoto Co.)	3

Total 12
 Total number cases reported to March 1, 1916..... 35

STATUS OF TUBERCULOSIS DISTRICT NURSING FOR MONTH ENDED
FEBRUARY 29, 1916

<i>Residence of Cases Visited by Districts</i>	<i>Total Number of Patients Under Instruction, on Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Patients Under Instruction to Date</i>	<i>Total Number of Patients Following Instruction</i>
Western	106	16	5	3	1	113	90
Southwestern	164	11	4	4	..	167	131
North Central.....	209	41	5	1	..	244	109
West Central.....	148	30	3	3	..	172	110
East Coast.....	273	29	9	3	..	290	289
Total.....	900	127	26	14	1	986	729

CRIPPLED CHILDREN

NAMES	In St. Lukes 2-1-16	In Brewster (Col.) 2-1-16	Outside Treatment 2-1-16	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment	Examined, Not Admitted	Total Cases During Month	Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment March 1st, 1916
A. N.	1	..	..	..	..	..	..	..	1	Spinal Bone graft 19th	..	Tbc. Spine	1
F. P.	1	..	..	..	..	..	..	..	1	..	..	Tbc. Hip	1
H. M.	1	..	..	..	..	..	..	..	1	Cast 16th	..	Tbc. Ilium	1
M. P.	..	1	..	..	..	..	..	..	1	Spinal Model 16th	..	Lateral curva- ture spine	1
L. H.	..	..	1	..	..	..	..	..	1	..	..	Club Feet	1
W. W.	..	..	1	..	..	..	..	..	1	..	..	Polio. Paralysis	1
B. Y.	..	..	1	..	..	..	..	..	1	..	..	Polio. Paralysis	1
C. W.	1	..	..	..	..	..	..	..	1	..	Cured 2-26-16	Club Feet	1
B. K.	..	1	..	..	..	..	..	..	1	Casts 2d	..	Club Feet	1
R. W.	1	..	..	..	..	..	..	..	1	..	..	Deformity Spas- tic Paralysis	1
O. D.	1	..	..	..	..	..	..	..	1	..	..	Tbc. Spine	1
S. W.	..	1	..	..	..	..	..	..	1	Brace 3d	In brace Im- prov. 6th	Lateral Curva- ture Spine	1
D. W.	..	..	1	..	..	..	..	..	1	Casts 2d	..	Club Feet	1
F. B.	..	1	..	..	..	..	..	..	1	Cast 5th	..	Ankylosis Knee	1
W. H.	1	..	..	..	..	..	..	..	1	Hip Plaster	..	..	..
S. B.	1	..	..	..	..	..	..	..	1	Spica 4th	..	Osteomyelitis	1
F. M.	..	..	..	1	..	..	..	..	1	Left Hos. 2-16	..	Polio. Paralysis	1
	..	..	..	..	..	..	..	..	1	Osteotomies and Casts 3d	..	Bow Legs	1
Total	8	2	6	..	1	..	..	..	17	..	2	..	15

BIOLOGICAL PRODUCTS

Distribution of Biological Products during February (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only). Number of persons receiving treatment:

<i>County and Town</i>	<i>Anti-Smallpox Vaccine</i>	<i>Anti-Rabic Vaccine</i>	<i>Anti-Typhoid Vaccine</i>	<i>Diphtheria Antitoxin Curative and Immunizing</i>	<i>Tetanus Antitoxin Immunizing</i>
ALACHUA					
Gainesville	20	..	..	4	..
BRADFORD					
Starke .....	..	..	..	3	..
DADE					
Miami	300	..	..	..	..
DE SOTO					
Wauchula	40	..	..	..	..
DUVAL					
Jacksonville	160	..	1	4	..
HILLSBOROUGH					
Plant City .....	..	..	..	2	..
Tampa .....	..	..	..	3	..
LEON					
Tallahassee .....	..	1	..	..	..
LEVY					
Williston .....	..	1	..	..	..
OSCEOLA					
St. Cloud .....	..	..	..	2	..
PUTNAM					
Palatka	10	..	..	..	..
SEMINOLE					
Sanford	20	..	..	..	..
ST. JOHN					
St. Augustine	100	..	..	..	..
Total.....	650	2	1	20	..

Total number persons receiving anti-smallpox vaccine in 1916 to March 1.....1,269
 Total number persons receiving anti-rabic treatment in 1916 to March 1.....6
 Total number persons receiving anti-typhoid vaccine in 1916 to March 1.....13
 Total number persons receiving diphtheria antitoxin in 1916 to March 1.....28
 Total number persons receiving tetanus antitoxin in 1916 to March 1.....

BACTERIOLOGICAL LABORATORIES
SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Total
Animal Parasites.....	213	104	26	1	17	361
Diphtheria	410	111	6	6	9	542
Gonorrhoea	61	50	61	1	7	180
Malaria	125	127	38	2	10	302
Pathological	15	3	3	0	0	21
Rabies	9	0	1	0	0	10
Tuberculosis	150	88	54	2	25	319
Typhoid	132	96	40	0	9	277
Water: Bacterial.....	36	22	4	4	55	121
Miscellaneous	113	65	41	7	74	300
	1,264	666	274	23	206	2,433

Total number of specimens examined by the Laboratories of the State Board of Health
 of Florida, February, 1916.....2,433
 Tallahassee Laboratory closed during February.

DISTRIBUTION OF DISEASES DETERMINED BY BACTERIOLOGICAL
LABORATORIES, FEBRUARY, 1916

(MALARIA)

TOWN	Diphtheria	Gonorrhea	Leptosy	Quarion	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Oryuris	Trichuris	Ascariis	Ameba	Tape	Robies	Wasserman	Meningitis
Alachua	1	..	..	1	..	..	..	..	..	..	..	..	..
Altamonte Springs	1	..	..	..	..	..	..	..	..
Alton	1	1	..	..	..	..	..	..	..	..
Apopka	1	..	..	..	..	..	..	..	..	..
Arcadia	1	1	1	1	..	..	..	..	..	..	..
Avon Park
Bartow	1	1	..	..	..	..	..	..	..	..	..
Bradentown
Bronson	1	..	..
Brooksville	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Bushnell	1	..	..	1	..	..	..	..	..	..	..	..
Campbellton	3	..	..	..	..	..	..	..	..
Canaveral	2	..	..	..	..	..	..	..
Chattahoochee	15	1
Christina	2	1	..	..	..	..	..	..	..	..	..
Citra	2	..	..	..	..	..	..	..	..	..	..
Clearwater	1	..	..	..	..	..	..	..	..	..
Cocoanut Grove	1	1	..	..	..	..	..	..	..	..
Daytona	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
Deerfield	1	..	..	..	..	..	..	..	..	..
DeFuniak Springs	1	..	..	..	..	..	..	..	..	..	..
DeLand	1	..	..	..	..	..	..	..	..	..
Douglass	1	1	..	..	..	..	..	..	..	..
Dunnellon	2	..	..	..	..	..	..	..	..	..
Eustis	1	..	..	..	..	..
Fellsmere	1	..	..	..	..	..	..	..	..	..
Fernandina	1	..
Ft. Meade	2	..	..	..	..	..	..	..	..	..	..
Ft. Myers	2	..	..	..	..	..	..	..	..	..
Ft. Ogden	1	..	..	..	..	..	..	..	..	..	..	..
Ft. Pierce	1	..	..	..	..	..	..	..	..	..
Frost Proof	2	..	..	..	..	..	..	..	..
Gainesville	1	..	..	..	..	..	..	..	..	..
Graceville	3	..	..	..	..	..	..	..	..	..
Grandin	2	..	..	..	..	..	..	..	..	..
Havana	1	3	..	..	..	..	..	..	..	..
Hawthorn	1	..	..	..	..	..	..	..	..	..
Hilliard	2	..	..	..	..	..	..	..	..	..
Inverness	1	..	..	..	..	..	..	..	..	..	..	..
Jacksonville	7	16	..	..	..	1	2	14	17	..	1	..	..	..	..	15	..
Release C.	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Carrier C.	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jasper	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Key West	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	1	..
Kissimmee	2	..	..	..	..	..	..	..	..	..
Labelle	3	..	..	..	..	..	..	..	..	..
Lake Butler	1	1	..	..	..	..	..	..	..	..
Lake City	1	..	..	..	..	..	..	..	..	..
Lakeland	1	2	..	..	..	..	..	..	..	..	..
Lake Worth	1	1	..	..	..	..	..	..	..	..	..
Laurel	1	..	..	..	..	..	..	..	..	..
Leesburg	2	1	..	..	..	..	..	..	..	..	..
Live Oak	1	..	..	..	..	..	..	..	..	..
Lutz Junction	1	1	1	..	..	..	..	..	..	..	..
Manatee	1	..	..	..	..	..	..	..	..	..
Mandarin	..	1	..	..	..	..	1	1	6	..	..	..	..	..	..	..	..
Miami	1	3	..	..	..	..	..	4	..	..	..	..	..	..	..	1	..
Millville	1	..	..	..	..	..	..	..	..	..
Morrison	1	..	..	..	..	..	..	..	..	..
New Smyrna	1	1	..	..	..	..	..	..	..	..
Ocala	1	1	4	..	1	..	..	..	..	..	..
Okeechobee	1	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Oklawaha Rel. C.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Orlando	..	1	..	..	..	..	..	3	2	..	..	..	..	..	..	..	..
Ozona	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pensacola	17	..	..	..	..	..	7	7	7	..	..	..	..	..	..	..	..
Perry	1	..	..	..	..	..	..	..	..	..
Plant City	1	..	1	..	..	..	..	..	..	..	..

DISTRIBUTION OF DISEASES DETERMINED BY BACTERIOLOGICAL
LABORATORIES, FEBRUARY, 1916

—MALARIA—

TOWN	Diphtheria	Gonorrhoea	Leprosy	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Oxyuris	Trichuris	Ascaris	Ameba	Tape	Rabies	Wasserman	Meningitis
Port St. Joe.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Princeton .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Raiford .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
St. Augustine .....	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..
Sanford	2	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..
Release C.	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sarasota .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Sebastian .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Sutherland .....	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Tallahassee	1	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Release C.	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tampa	7	2	..	..	2	1	9	13	6	..	4	2	2	2	..	5	..
Titusville	5	1	..	..	..	..	1	..	2	..	..	..	..	..	..	..	..
Release C.	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tropico .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Wauchula .....	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Welaka .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
West Palm Beach..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Williston .....	..	..	..	..	..	..	..	..	3	..	..	..	..	..	1	..	..
Winter Haven .....	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Winter Park .....	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Total.....	84	45	1	..	3	6	38	75	94	4	5	3	3	2	2	38	1

VETERINARY DIVISION
DIPPING VATS

Cattle dipping vats reported constructed during February, 1916:

Washington County at Chipley.....	2
Total number of vats reported built to March 1, 1916.....	90

GLANDERS

Diagnosed by Veterinarian during February, 1916:

None	2
Total number cases in 1916 to March 1.....	2

INTRASTATE SHIPMENTS OF DIPPED CATTLE INTO DADE COUNTY

Feb. 5, Fort Pierce to Miami for immediate slaughter.....	28	cattle
Feb. 10, Fort Pierce to Miami for immediate slaughter	68	cattle
Feb. 16, Fort Pierce to Miami for immediate slaughter	37	cattle
Feb. 22, Fort Pierce to Arch Creek.....	80	mules
Feb. 27, Fort Pierce to Miami for immediate slaughter.....	35	cattle
Totals: cattle, 168; mules, 80.....	248	

IMPORTATION OF CERTIFIED LIVE STOCK INTO FLORIDA

Feb. 1, Biloxi, Miss., to Compass Lake.....	3 cattle		
Feb. 1, Leesburg, Va., to Anthony.....	7 cattle		
Feb. 1, Georgia to Jacksonville.....	44 cattle		
Feb. 1, Milton, Tenn., to Marianna.....		3 horses	18 mules
Feb. 2, Valdosta, Ga., to Starke.....	2 cattle		
Feb. 2, Versailles, Ky., to Middleburg.....	2 hogs		
Feb. 2, Stanley, Ky., to Luna.....	3 hogs		
Feb. 2, Atlanta, Ga., to Jacksonville.....		11 horses	16 mules
Feb. 3, Atlanta, Ga., to Jacksonville.....		8 horses	4 mules
Feb. 3, Columbia, Miss., to Homestead.....		2 horses	20 mules
Feb. 4, Smyrna, Ga., to Jacksonville.....	1 hog		
Feb. 4, La Grange, Ga., to Drifton.....	1 hog		
Feb. 4, Fall Rough, Ky., to Plant City.....	4 hogs		
Feb. 5, Chicago, Ill., to Pensacola.....		3 horses	15 mules
Feb. 7, Brown Summit to Brooksville.....	5 hogs		
Feb. 7, Columbia, Tenn., to Jacksonville.....			14 mules
Feb. 8, Versailles, Ky., to Middleburg.....	2 hogs		
Feb. 8, Alderson, Pa., to DuPont.....	2 hogs, 6 sheep, 2 cattle	2 horses	
Feb. 8, Visalia, Cal., to Worthington Springs.....			56 mules
Feb. 9, Lancaster, Mo., to Omeco.....	1 hog		
Feb. 9, Atlanta, Ga., to Madison.....			30 mules
Feb. 9, Atlanta, Ga., to Madison.....		17 horses	35 mules
Feb. 9, Atlanta, Ga., to Dade City.....		2 horses	
Feb. 9, Trenton, Ky., to Cottondale.....	4 hogs		
Feb. 10, Xenia, Ohio, to Green Cove Springs.....	2 hogs		
Feb. 10, Augusta, Ga., to Parrish.....		2 horses	
Feb. 10, Chicago, Ill., to Ponce de Leon.....		15 horses	10 mules
Feb. 10, Atlanta, Ga., to Jacksonville.....		3 horses	
Feb. 10, Atlanta, Ga., to Gainesville.....		4 horses	20 mules
Feb. 11, Union, Miss., to Milton.....		2 horses	4 mules
Feb. 12, Atlanta, Ga., to Jacksonville.....			21 mules
Feb. 12, Atlanta, Ga., to Jacksonville.....		4 horses	30 mules
Feb. 12, Cincinnati, O., to St. Clair.....		2 horses	
Feb. 15, Champaign, Ill., to Bunnell.....			2 mules
Feb. 17, Pleasant Plains, Ill., to Cottage Hill.....	7 hogs		
Feb. 17, Columbia, S. C., to Altha.....	2 hogs		
Feb. 18, Orleans, Ind., to Jacksonville.....	1 hog		
Feb. 19, Atlanta, Ga., to Tallahassee.....			20 mules
Feb. 19, Rome, Ga., to Valrico.....			3 mules
Feb. 20, Chicago, Ill., to Milton.....		9 horses	26 mules
Feb. 21, Calhoun, Ga., to Green Cove Springs.....	1 hog		
Feb. 21, Atlanta, Ga., to Jacksonville.....		2 horses	20 mules
Feb. 22, Covington, Ky., to Clearmont.....		1 horse	
Feb. 22, Atlanta, Ga., to Starke.....			19 mules
Feb. 22, Atlanta, Ga., to Ocala.....		1 horse	20 mules
Feb. 22, Atlanta, Ga., to Ocala.....		2 horses	20 mules
Feb. 24, Xenia, Ohio, to Green Cove Springs.....	15 hogs		
Feb. 24, Chicago, Ill., to Live Oak.....		9 horses	18 mules
Feb. 24, Aledo, Ill., to Martel.....	1 hog		
Feb. 24, Guthrie, Ky., to Triby.....	1 hog		
Feb. 24, Lulu, Tenn., to Brooksville.....	8 hogs		
Feb. 25, Versailles, Ky., to Ponce de Leon.....	1 hog		
Feb. 25, Woodbury, Ga., to Jacksonville.....	17 cattle		
Feb. 26, Charleston, Ind., to Delray.....	2 cattle	1 horse	1 mule
Feb. 27, Thomasville, Ga., to Tampa.....	14 cattle		
Feb. 28, Shelbyville, Tenn., to Hallandale.....	1 hog		
Feb. 28, Clinton, Ill., to Lowell.....		2 horses	
Feb. 29, Waycross, Ga., to Jacksonville.....			13 mules
Totals: horses, 113; mules, 456; cattle, 91; hogs, 65; sheep, 6.....			731
Total number of shipments.....			58

EXPORTATION OF CERTIFIED LIVE STOCK FROM FLORIDA

Feb. 2, Hastings to Malcehborough, S. C.....		1 mule
Feb. 6, Lithia to Broadway Siding, S. C.....	1 horse	
Feb. 11, Tampa to New York City.....	1 horse	
Feb. 20, Clearwater to Aiken, S. C.....	2 horses	
Feb. 24, Jacksonville to Berea, Tenn.....	2 horses	
Totals: horses, 6; mules, 1.....		7
Total number of shipments.....		5

HOG CHOLERA AGENTS APPOINTED DURING FEBRUARY, 1916

Lewis Hudson, Inglis, Levy County.
R. W. Blacklock, Ocala, Marion County.

HOG-CHOLERA SERUM DISTRIBUTED, FEBRUARY, 1916

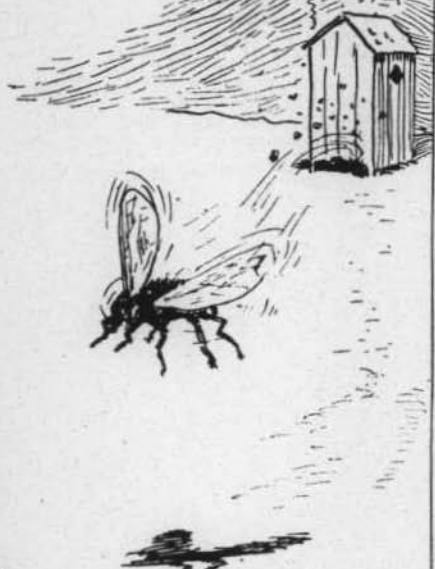
Alachua	9,750 c. c.
Baker .....	..... c. c.
Bay .....	..... c. c.
Bradford	9,550 c. c.
Brevard .....	..... c. c.
Broward .....	..... c. c.
Calhoun	6,100 c. c.
Citrus .....	..... c. c.
Clay	2,050 c. c.
Columbia	650 c. c.
Dade .....	..... c. c.
DeSoto	10,550 c. c.
Duval	450 c. c.
Escambia	5,600 c. c.
Franklin .....	..... c. c.
Gadsden	9,800 c. c.
Hamilton	4,850 c. c.
Hernando	1,050 c. c.
Hillsborough	7,200 c. c.
Holmes	15,250 c. c.
Jackson	4,350 c. c.
Jefferson	14,550 c. c.
LaFayette	1,750 c. c.
Lake .....	..... c. c.
Lee .....	..... c. c.
Leon	6,150 c. c.
Levy	11,050 c. c.
Liberty	2,000 c. c.
Madison	5,450 c. c.
Manatee .....	..... c. c.
Marion	6,850 c. c.
Monroe .....	..... c. c.
Nassau .....	..... c. c.
Orange .....	..... c. c.
Osceola .....	..... c. c.
Palm Beach.....	..... c. c.
Pasco .....	..... c. c.
Pinellas .....	..... c. c.
Polk	3,450 c. c.
Putnam .....	..... c. c.
Santa Rosa .....	..... c. c.
Seminole	1,000 c. c.
St. Johns.....	..... c. c.
St. Lucie.....	..... c. c.
Sumter	4,800 c. c.
Suwanee	5,150 c. c.
Taylor.....	..... c. c.
Volusia .....	..... c. c.
Wakulla.....	..... c. c.
Walton.....	800 c. c.
Washington.....	2,750 c. c.
Total.....	152,950 c. c.

Estimated number of hogs treated, February.....	7,283
Estimated weight of hogs treated, February.....	444,263 lbs.
Amount of hog-cholera serum purchased during February.....	100,000 c. c.
Cost of serum purchased during February.....	\$750.00
Amount of serum distributed in 1916, to March 1.....	252,600 c. c.
Estimated number of hogs treated in 1916, to March 1.....	11,811
Estimated weight of hogs treated in 1916, to March 1.....	716,532 lbs.
Cost of serum purchased in 1916, to March 1.....	\$1,500.00

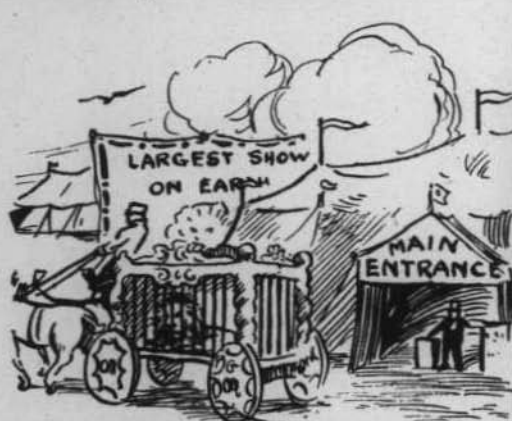
DETAILS PERFORMED BY THE VETERINARY DIVISION

Feb. 2-3, investigation glanders at Live Oak; Feb. 3, twenty mules and two horses inspected for ticks at Jacksonville; Feb. 6-7-8, attended and addressed Live Stock meeting at Tampa; Feb. 23, five horses tested for glanders at Jacksonville.

WHY?



**SHOULD THE FLY BE ALLOWED
MORE LIBERTY THAN THIS BEAST ?**



**THE LION IS OFTEN A
FACTOR IN CIRCUS
PROCESSIONS.**



**THE FLY IS TOO OFTEN
A FACTOR IN FUNERAL
PROCESSIONS.**



HEALTH NOTES

OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

STATE BOARD OF HEALTH

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Vol. XI

April, 1916

No. 4 (New Series)

HON. FRANK J. FEARNSIDE, President
Palatka, Fla.

HON. S. R. MALLORY KENNEDY, M. D.
Pensacola, Fla.

HON. C. G. MEMMINGER
Lakeland, Fla.

EDITED BY
JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

EXECUTIVE OFFICE
State Board of Health Building, Springfield Boulevard
Jacksonville

BRANCH OFFICES

ASSISTANTS TO THE STATE HEALTH OFFICER

Tampa Key West St. Augustine
Pensacola Gainesville Ocala

AGENTS

Miami Fernandina Palatka

BACTERIOLOGICAL LABORATORIES

CENTRAL LABORATORY

Jacksonville

BRANCH LABORATORIES

Tampa Pensacola Miami
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

gm

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Publication 89, Hog Cholera, January, 1912, pp. 12.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
- Publication 102, Typhoid Fever in Tampa, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 24.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 121, Vital Statistics, All Florida Municipalities can have Vital Statistics, Leaflet, Reprint from Florida Health Notes, August, 1914.
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 137, Report of Surgeon in Charge of Work under the "Crippled Children" Act, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 8, illustrated.
- Publication 138, Annual Report of Veterinary Department of the State Board of Health of Florida, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 57.
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.

THE BLESSING OF PAIN

By DR. CHAS. E. BANKS, Senior Surgeon, U. S. Public Health Service.

This title sounds like the text of a sermon on the "Pleasures of Poverty" or the "Delights of Freezing to Death," and it might have been selected by the person who should essay authorship on these paradoxical topics. But the author of this brochure merely hopes to bring back to its proper mooring the stray and straying opinion of mankind that pain is an evil, or as a number of illogical logicians think, a delusion and a snare.

It is not an opportune time, of a certainty, to speak of pain as a blessing to sister Araminta when one of her teeth feels as big as a walrus tusk and as sore as a defeated politician; nor to brother Joash in the wee sma' hours of the night as he totes his vociferating offspring round the darkened chamber, like a martyred marsupial. There are times and places for all things, and in the lull between sister's toothache and baby's colic it may be well to state definitely just why pain is a blessing to humanity. It is not only that, but it is an indispensable requirement for the preservation of human life. Without pain we would be as helpless as a Surinam toad in a pail of molasses. If you don't believe it get a pail of molasses and try it.

We come into this world endowed with certain qualities and senses which give us knowledge that we exist and secondly that the earthly environment in which we live has myriads of differential attributes, such as heat, cold, smoothness, roughness, odors, flavors, pleasures and discomforts. This quality is denominated by the pundits in one of their long words, intended to mystify the proletariat—*Esthesia*. It means the sense of being. This sense of being is lodged in the nervous system, a marvelous lacework of filaments radiating from the brain and spine reaching to every ultimate cell of the body, and there is not a section of one's skin so small that it will not feel the touch of a needle point. Some of these nerves are as large as a pencil and some are so small that they are microscopical. These nerves connect us with the world we live in, and by them we feel, see, hear, taste and smell the things of earth and move among them. If we didn't have nerves we would pirouette through the world like an animated automaton enamored of the possibilities of the fourth dimension. On a beautiful morning in January, with the mercury below zero we would walk out and freeze to death did not our nerves ache with the cold and warn us to protect ourselves; or we would start to remove red-hot coals from the grate and broil our digits unless our nerves screamed their protest in pain. In other words if it were not for the nerves that ache we would not know where we were at, and some kind neighbor would have to come in and tell us that we were living. Nerves and their pains are as essential to us as the oxygen we breathe. The nervous system is our Life Saving Service and every time a nerve aches or quivers in pain it is a blessing in disguise. The first grumbles of a tooth warn you that disease germs are attacking its structure; the early aches in one's head are a call for help of some kind, a notice that somewhere something is wrong, perhaps eye-strain, constipation, exhausting mental work or what not. A man has a sharp pain in his—well, to describe the

location from the verse of the famous operatic partner of Sir Arthur Sullivan

It made him moan, it made him groan,
It wore him almost to a mummy;
Why should I hesitate to own?
The pain was in his little tummy.

The pain is the fortunate cue for the wise to follow. There is trouble in or about the region affected, and the discomfort is a fore-runner of what may follow if one does not heed its beneficent appearance. If one did not have these pains his funeral would be in full operation before he woke up to the fact that he was the corpse. Pain is a blessing in the sense that it is the only thing which will drive man to self protection. This device of nature makes him sit up and take notice in the "safety first" programme of human existence. Just as sure as man ignores these beneficial messages of pain and tries by some jugglery of inverted philosophy to regard them as the imaginings of an evil mind just so sure will come the inevitable forfeit.

CARE OF THE BABY IN SUMMER

The following excellent suggestions and instructions for the care of the baby during the hot summer months are issued by the Children's Bureau of the U. S. Department of Labor. They should prove interesting and instructive to mothers.

MINOR AILMENTS

A baby may be made uncomfortable and restless by various causes which are readily removed. Attention has already been called to the fact that babies and young children frequently suffer from thirst. They should be offered a drink of water several times a day, and particularly in hot weather. When a baby cries in the night, a drink will often quiet him, and send him to sleep.

Irritating clothing is at times responsible for the baby's fretfulness. Woolen socks, or shirts, or stiff cap strings are quite enough to spoil his comfort, even if he is well, and, in hot weather especially, a superabundance of clothing is frequently responsible for much real suffering.

Dress the baby in the lightest cotton garments and keep him as cool as possible. Do not be afraid to let him have nothing on but his diaper and one other thin garment on the very hot days.

PRICKLY HEAT

One of the troubles from which a baby often suffers in summer is prickly heat. This ailment appears as a fine red rash usually on the neck and shoulders and gradually spreads to the head, face and arms. It is caused by overheating, due either to the hot weather or to the fact that the baby is too warmly dressed. The rash comes and goes with the heat, and causes intense itching. The remedy for it is to take off all

the clothing and give the baby a sponge bath in tepid water in which common baking soda has been dissolved. Use 1 tablespoonful of soda to two quarts of water. Use no soap, and do not rub the skin, but pat it dry with a soft towel. After the skin is thoroughly dry, dust the inflamed surfaces with a plain talcum powder.

This ailment, like all others, is more readily prevented than cured. Frequent cool baths, very little clothing, simple food and living in cool rooms, or in the open air will probably save the summer baby from much of the annoyance of prickly heat and other more serious ills.

CHAFING

Fat babies are very apt to suffer from chafing, especially in hot weather. It appears as a redness of the skin in the buttocks or in the armpits, or wherever two skin surfaces persistently rub together.

Much the same treatment is required as in prickly heat. Never use soap on an inflamed skin. Instead use a soda, bran or starch bath. Directions for these baths are given in a publication called *Infant Care*, which may be had, free of charge, by addressing a request to the Chief of the Children's Bureau, U. S. Department of Labor, Washington, D. C.

Great care should be taken not to let the baby scratch the skin, when it is irritated. Sift together two parts powdered cornstarch, and one part boric acid, and use it freely on the chafed places. Remove wet or soiled diapers at once. Wash and dry the flesh thoroughly, then dust the powder freely between the legs.

MILK CRUST

This is a skin disease affecting the scalp, in which yellowish, scaly patches appear on the baby's head. These patches should be softened by anointing them with olive oil or vaseline at night, and the head washed with warm water and castile soap in the morning.

If the crust does not readily come away, repeat the process until the scalp is clean. Never use a fine comb nor the finger nails to remove the crusts, as the slightest irritation of the skin will cause the disease to spread further. The scales will usually disappear after a few days of careful treatment.

CONSTIPATION

If the baby does not have at least one full bowel movement in 24 hours or in 36 at the outside, he is in need of such care as will bring about this result. Breast-fed babies often respond to an increased supply of laxative food in the mother's diet. If this is not sufficient, a six months old baby may have a tablespoonful of strained orange juice between two of his morning feedings.

Bottle-fed babies may have fruit juice in the same way and thin oatmeal gruel may be substituted for barley water in making up the feedings, after the baby is four months old.

Perhaps the best preventive of constipation is to teach the baby to move the bowels at the same hour every day. This training should be begun when the baby is three months old, and should be faithfully con-

tinued until the habit is firmly established. Not only does this practice establish in the baby from the beginning of his life a custom which will greatly increase his chances for good health, but results in an enormous saving of work to the mother. She no longer finds herself confronted with a pile of soiled diapers to wash, but instead gives fifteen minutes of careful attention to the baby each morning.

Directions for carrying out this training are given in the pamphlet on Infant Care, already mentioned. Do not use enemas for the relief of constipation save in emergencies, and do not resort to purgative medicines except with the doctor's advice.

A THREE-DAY PLEA FOR HEALTH

It took Dr. Victor G. Heiser, American medical expert in the Philippines, three days of steady talking to convince the native members of the Filipino Parliament that the health-measures the United States has inaugurated and maintained for the last fourteen years in those islands must be kept up for the safety and welfare of the people themselves. When, in 1914, the Filipinos for the first time obtained control of both chambers of their legislative assembly, says *The World's Work*, they immediately took advantage of this opportunity to begin a delightful campaign of economy. Here the American Government was ordering a tremendous expenditure each year for health and sanitary work. What is health and sanitary work? they reflected—a lot of bothersome rules and regulations and strange customs, with buildings erected here and there, for what purpose nobody understands. Then why not cut the health and sanitary appropriation squarely in half? Excellent idea! With difficulty Dr. Heiser obtained permission to speak before the assembly before this resolution was passed. He was supposed to speak for twenty minutes, but he had a good deal to say, so he spoke for three days—as we read:

He stopt occasionally for meals, and a little sleep; for the rest of the time he entertained the assembled lawmakers with descriptions of Manila and the Philippines as it had existed prior to 1903, and of the same places at the present time. At first his auditors were uninterested, almost hostile. They sat silent and emotionless, perhaps somewhat bored, apparently persuaded that nothing the speaker could say would affect the situation. But Dr. Heiser, after talking nearly a day, scored his first point.

Before the reforming Americans came, the Filipinos had their own system of handling the insane. They used to tie the poor creatures, like dogs, to stakes under the Filipino houses. Sometimes a flood-tide rose, or a fire swept over the light-material districts; occasionally, but not invariably, the people remembered to unhitch the miserable lunatics. The Americans have abolished this system, and erected beautiful, sanitary asylums for the insane.

Dr. Heiser called the assembly's attention to the fact that their budget cut down the appropriation for the care of the insane. If it passed he would have to let loose several hundred lunatics in the streets of Manila.

"This will be necessary," he declared, "since there will be no money to provide for them. These lunatics, you know, are of a particularly dangerous kind: there are many murderers, incendiaries, and the like among them. But I shall have to set them free. And I shall put a badge on each one, inscribed, 'Set free by the vote of the Filipino Assembly.'"

The uninterested brown men showed their first signs of life.

"That would be inhumane!" they shouted.

"Of course," replied Dr. Heiser, "but it will be your inhumanity, not mine."

He recounted how the Health Service had collected and isolated about 6,000 lepers at Culion. But the budget cut down the appropriation for the leper colony. What could he do? He should have to let loose a large number of lepers, who would wander about as of old, infecting thousands more every year. "Yet you Filipinos," he said, "demand your independence and say that you are capable of self-government. Is this the way to convince the American people that you are?"

Dr. Heiser's force and eloquence saved the day on that occasion. The assembly, after listening three days, arose and requested that he himself write the health section of the appropriation bill.—*The Literary Digest*.

THE SCHOOL CHILD AND HEALTH CONSERVATION

One of the most encouraging developments in the educational work of the State Board of Health is the intelligent interest manifested by the school children of Florida in the Educational Health Exhibit Train. This undertaking was launched with some trepidation, it being feared that many would be interested only in the novelty of this method of demonstration rather than in the vital truths of health conservation which it portrays, but these fears were unfounded, as is evidenced by the enthusiastic reception which is accorded the "School on Wheels" at every stop in its long tour of the State. And not only is it enthusiastically received, but the many charts, models and other devices which it contains are carefully studied.

This interest is manifested by old and young alike; but it is through the education of the coming generation that the best results are to be hoped for. It is too often the case that the older members of the family have become so "set in their ways" that it is to the children to whom we must look for any improvement in the sanitary conditions about the home, especially in the rural districts where unfortunately there is often a tendency toward that form of "ancestor worship" which has as its motto, "What was good enough for father is good enough for me."

In many towns of the State the school authorities have arranged for the pupils to devote practically the entire day to the study of the Exhibit, prizes being awarded for the best descriptive essay. That the children understand what they see and grasp the significance of the facts so graphically presented is shown by the clearness with which they describe the various exhibits and discuss the lessons which they

draw from them. Mr. A. E. Maxwell, of the Green Cove Springs public school, sends us an excellent essay which shows the clearness with which these health lessons are impressed upon the minds of the school children. This essay is published in full in this issue of the NOTES.

C. H. D.

OBSERVATIONS ON STATE BOARD OF HEALTH CAR

By Gladys Brown, 7th Grade

The first thing I saw on entering the car was a table set for dinner. It would have been a good dinner had it not been for the flies swarming over it. There was a baked chicken, eggs and-lettuce sandwiches, rolls, cakes and in the center a dish of fruit, bananas and pears. On the chicken were three flies which looked like they had been cooked with it. There was also flies on the other food.

Over the table was a picture of a house and in the door an old fat woman with her hair screwed up in a knot. She was standing in the door ringing a bell. A fly was walking towards the door with a suit-case in his hand. His name, "Mr. Fly," was on it. Thousands of flies were coming from out-houses, barrels and places of filth. There were no screens to the windows and the blinds were shattered. By the steps was a bush with one flower on it. Under the picture was written, "Dinner's Ready."

On the opposite side from this was shown a house, also a barn and other out houses. There was a large pile of fertilizer near by and the flies flew from this into the home, where, of course, they lit on food, etc. There were chickens in the barn yard. One was dead, maybe of cholera. There was a horse looking out of the window of the barn. Through the kitchen window I saw a kettle steaming on the stove. There were no screens to this window, either—everything open to the flies.

On the wall were papers illustrating how to vaccinate for smallpox, typhoid fever and diphtheria, also the instrument to inoculate hogs with. One picture had some people on it who had smallpox with terrible sores all over them, who had not been vaccinated. Vaccination would have saved this pain and scars for life if they happen to live.

In one picture flies were flying from a barn, fertilizer piles, garbage barrels and other insanitary places into the window of a house. A man was trying to eat dinner, at the same time trying to fight flies with his handkerchief. A woman was standing nearby with a waiter of food which had overturned from fighting flies. In the next room was a woman sick with fever. Her husband and doctor by her bed. The Angel of Death coming in at the window. Under this a funeral procession. This death could have been prevented had the place been made sanitary—the house screened from flies, etc.

In a glass case on the wall was a child's skull. It showed the first teeth through, also the second teeth formed ready to come through when the first were pulled.

Next, I read of the care of the teeth. It urged everyone to visit a good dentist often, showing the kind of tooth brushes to be used, both for children and grown-ups. It also showed dental floss to clean between the teeth. It showed sound, perfect teeth and teeth with a cavity and the cavity grew larger from neglect until it destroyed the tooth.

I next saw how to care for snake-bites, fainting people, how to bind up broken and fractured bones and how to make emergency slings.

There were stereopticon pictures in both cars.

In one picture was a man with consumption. Money, strength and courage were leaving him. Near by a doctor stood, winking his eye, and fifty, ten and five dollar bills, also silver pieces were flowing into his hand from the sick man though he was not recovering.

There was a picture of a man's hat and by it, "When you want to spit, spit in your hat." I suppose they meant to burn it next. There was a large fly representing an air ship dropping typhoid fever bombs in the streets.

This is all I remember seeing in the first car. Between the cars was a picture of a man with his mouth open wide and in his mouth a magnifying glass. Under it was "Smile and Look at Your Teeth." Opposite it was a little boy with his first tooth pulled.

In the second car was a dipping vat showing the crook to aid the cows to get in and out of the vat. There was a place where they could eat and drink.

On the wall was a bottle of fake consumption medicine, on it a picture of a doctor's head. Suddenly it will change into a skull and then back to the doctors' face, etc.

Next was a baby carriage with a large doll in it.

There was a table showing how to screen doll beds from mosquitos and a pen to keep the baby in.

Next was a case showing one hundred babies born one year. There were seventy-five left the second year and seventy the third year. Among the babies were signs showing what caused the deaths. Among them were, "too weak to live," "tuberculosis," "diphtheria," "whooping cough," and "scarlet fever."

Then I saw a dark room showing poverty and dirt. There was not much furniture in it. Then the scene changed and there was a nice, clean room, all white and sanitary.

Next I saw a hospital and on the porch a doll with a shawl over head and body, only her face exposed to the air. It was screened on all sides. A doll was in a bed. There were three chairs, a bed and a table in the room.

Then there were two sewerage plants shown. One for the town and the other for the home. The one for the town was much larger. Both complete in their way and everything plainly illustrated so that they could be easily understood and copied.

The next thing was a house in a valley. On the hillside above was the barn, out houses, etc. At the barn was a closed well for the stock, while at the house was an open well, and a bucket used for drawing water. I could see that the water for the stock was purer than that for the people.

There was one house with sewerage pipe which went straight down through different kinds of soil into a porous clay soil. Also a pump going through these different soils to a stream which furnished water for it.

The last was a little bell which I had been hearing ring. It tapped every minute to remind you that someone died from a preventable disease.

This was the end of my interesting sight-seeing in the cars.

Health Briefs

The careless spitter is a public danger.

Moderation in all things prolong life.

Walking is the best exercise, and the cheapest.

The air-tight dwelling leads but to the grave.

Unpasteurized milk frequently spreads disease.

Bad teeth and bad tonsils may be the cause of rheumatism.

A little cough is frequently the warning signal of tuberculosis.

DO IT NOW! Consult with a reliable physician if you think you have a cancer. Delay may mean untold suffering and death. Remember cancer is curable in its early stages.

It is well known that lack of screens allows the dissemination of disease by insect carriers. It should likewise be known that the authorities who do not enforce the screening laws are responsible for diseases spread in this way, insofar as a neglect of their duties is concerned.

Seventy-six out of eighty-seven cases of typhoid fever which occurred in a recent outbreak have been traced by the United States Public Health Service to infected milk. Had the first cases been reported to a trained health officer the outbreak could have been stamped out promptly. When will we learn that disease prevention is sure and cheap?

Investigations have shown that about 75 per cent of all typhoid fever in Florida is transmitted by flies. It follows that this disease could be reduced 75 per cent if flies were not permitted access to excrement containing typhoid germs. It is reasonable to expect that any municipality rigidly enforcing a privy-screening ordinance could reduce typhoid cases one-half, and this has been borne out in one of the largest cities of the State.

Correspondence

A GRATIFYING PELLAGRA REPORT

Gainesville, Florida, April 5th, 1916.

Dr. Joseph Y. Porter, Jacksonville, Florida.

Dear Doctor: In accordance with your instructions, I have visited the sections of Bay and Calhoun counties in which I worked last summer, for the purpose of ascertaining the general conditions now present, and especially to note the presence or absence of pellagrous symptoms in those treated during my stay there last year.

I found only three recurrent cases of the hundred and fifty of last year, and no new cases at all. One death was reported, however, this patient was the wife of a faith-healer, and I did not see her until, to use the husband's pathetic expression, he "had found out that prayer didn't do pellagra any good at all."

The general condition of the patients seen was very gratifying. Weight had increased ten to fifteen pounds, the skin was clearer and everywhere I found a healthier, happier mental condition. The people seemed to feel that some bug-bear had been destroyed.

I shall withhold my final conclusions until the latter part of the summer, notwithstanding the good showing of the present, and believe we will then have data enough to make the unequivocal statement that pellagra is due to an unbalanced ration and can be cured by eating the proper food.

Yours very truly,

(Signed) J. E. Taylor, M. D.,
Assistant to the State Health Officer.

Jacksonville, Fla., April 6th, 1916.

Dear Doctor: This is to acknowledge receipt of your report under date of April 5th, relative to your visit to those sections of Bay and Calhoun Counties in which you were engaged, during the past summer, in the investigation and treatment of pellagra.

The conditions reported are exceedingly gratifying and I trust that further investigation at a later date will serve to substantiate the present evidence that the line of treatment which has been followed is the correct one. It will be further proof of the correctness of the theories which have of late been advanced by the officers of the Public Health Service.

Very truly yours,

(Signed) Joseph Y. Porter, State Health Officer.

TIME TO FIND OUT

....., Florida, April 10th, 1916.

Dr. Joseph Y. Porter, Jacksonville, Florida.

Dear Doctor: For some time the writer has been troubled with a severe cough, which treatment seems unable to subdue. In December I contracted a severe cold which settled on my lungs, but of which I thought little at the time. Lately, however, it has given me considerable trouble in the way of pain—in the mornings feels like a large lump in my chest—and a few days ago I noticed small flecks of blood coming up with the phlegm.

A local physician gave me an examination a few days ago and said that in his opinion it was caused more from a bronchial affection than anything else.

My lungs have been considered strong. Have had a good expansion and not experienced any difficulty or inconvenience until recently. Seem to be susceptible to colds, though.

Would you kindly mail me a bottle and container, with directions whom to send to for information that is reliable?

If I should have happened to contracted tuberculosis, in justice to myself, my family and all those with whom I come in contact, I should like to know, in order to take such steps as are necessary for the protection of all.

Thanking you in advance, I am,

Yours very truly,

Jacksonville, Fla., April 14th, 1916.

Dear Sir: In compliance with your request, dated April 10th, there is being sent you, under separate cover, a container for submitting a specimen to be examined for tubercular bacilli. In this connection I wish to impress upon you the necessity of having a thorough physical examination, performed by a reliable physician. Oftentimes in the incipient stages of tuberculosis the microscopical examination will not show any tubercular bacilli, notwithstanding the fact that the disease exists.

I am sending you, under separate cover, copy of the booklet entitled "Playing The Lone Game Consumption," which you should read carefully.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

PATENT CLOSETS VERSUS SEPTIC TANK

.....Fla., March 28th, 1916.

Dr. Joseph Y. Porter, Jacksonville, Florida.

Dear Doctor: Enclosed you will find an advertisement of a sanitary closet clipped from a farm paper. Is it practical and successful? Will it do the work as well as a septic tank? Please give me your opinion on it in full, if it is not too much trouble. It would be easier and cheaper to install and operate (I imagine) than a septic tank if as good. By the way, is there any danger of typhoid fever being caused by septic tanks? I've heard the opinion expressed that there was. You will please return the clipping or advertisement, in your reply.

Yours very truly,

Jacksonville, Fla., March 30th, 1916.

Dear Madam: I have received your letter of March 28th, enclosing an advertisement of a sanitary closet. I presume from the cut shown in this clipping, that this closet is of a chemical type and I think it would be fairly satisfactory, but would not by any means prove as effective as a septic tank.

A chemical apparatus of this kind would require constant cleansing, and the refuse removed therefrom would have to be burned or buried, or otherwise disposed of in a proper manner.

The septic tank would require very little attention after its original construction, but would, of course, be considerably more expensive than this plant concerning which you write.

This difference in expense, however, would be largely counterbalanced by the fact that the cost of upkeep would be practically nothing upon the septic tank, whereas there would be a continual expenditure with the closet of a chemical type.

There is no reason why a septic tank should be the cause of typhoid fever, if properly constructed. Typhoid fever is a sewage-borne disease and may be spread by any system of sewage disposal when it is not properly built or properly managed.

I am mailing under separate cover copies of publication 99 and a small pamphlet on the Imhoff tank, in both of which you will find full plans and specifications for the construction of sanitary sewage plants for the rural residence.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

COMPULSORY BODY-BUILDING

That it is the duty of public educational systems to build up the health of children as well as to train their minds is the contention of Dr. C. Ward Crampton, physical training expert.

Not a bad idea, is it?

Out of the 22,000,000 school children in the United States, says Dr. Crampton, more than 12,000,000, or over half, receive no physical or health education at all. Only one in five high schools has physical training for the mass of students. About three-fourths of them have athletics for the few, which is, of course, no substitute for compulsory physical training. Part of the neglect may be ascribed to the pressure of mental training, but most of it is due to the apathy or ignorance of parents, who do not, according to the expert, "charge against education as now conducted the preventable illnesses of their children." Dr. Crampton wants to see a national awakening on this subject.

The original idea of the public schools was to furnish book-learning to children who, presumably, lived wholesomely out of school hours. The fact that the school itself, with its crowding, its discipline, its faults of ventilation, its passing on of infections could be responsible for illness and other physical evils did not enter into consideration. The time has come, however, when it is known that health can be taught, bodies can be strengthened or weakened at will.

With spring time at hand, the long vacation imminent, plans for the new year under discussion, there is no better time than now to arrange so that the schools may begin to be body-builders rather than body-breakers.

If yellow fever could be eliminated from Panama, why not grip, measles and nervous breakdowns from a school district? Much has been done in this direction, but more remains yet to do—Florida Metropolis.

FLIES AND SCREENS

The State law says flies must be screened from all places where food, that is to be served uncooked, is offered for sale and that earth closets must be screened, and Sheriff Denmark says the law is to be enforced. Now why in common sense do you want to be forced to keep healthy. The law is intended for your own protection and if you have the proper regard for yourself you will keep it without being forced to do so.

It is a fact, beyond dispute, that flies, more than any other agency, are responsible for typhoid fever. More than twice as many soldiers died by typhoid fever than by Spanish bullets during the Spanish-American war, and this great death rate was due to flies.

First screen your closets and prevent infection as well as breeding, then screen your food to prevent your neighbor's flies from infecting it.—Raiford Tribune.

PATENT MEDICINE

It is impossible now-a-days to pick up a daily paper without seeing where Bill Smith gained fifty pounds a week by taking a certain popular medicine and where old Lady Snoggins had been bedridden all her natural life, but after taking two doses is able to play football. We admit the thing is past belief—marvelous.

Last week a friend of ours told us that he was in the habit of passing a certain drug store where a popular medicine is being sold. He passes this

store three times a day. He noticed that he was gaining in weight and in two weeks had took on eight pounds. He was astounded and decided to change his route. In a few days he got back to his normal weight.

Alf Ziegenbiemingo, a Russian, had lost his great grandpa in the Civil War. He picked up a daily paper and saw the ad. His next move was to a drug store, where he purchased a bottle. Going to the cemetery he dug up his grandpa, poured a dose down him and now his granddaddy can plow from sunup to sundown. He is getting younger every day and Alf fears that if he keeps getting younger he will soon be a baby and he will lose a good plow hand.

Mike Billingham looked like a knitting needle. Every time the wind blew it made such a noise among Mike's bones that it disturbed his friends. He bought a bottle. His manager is now busy trying to arrange a match with Jesse Willard this summer.

Try a bottle.—Macclenny Standard.

PUBLIC HEALTH EDUCATION

With demonstration trains, showing how to preserve the health and safety of the people from the little baby up, the people of this great country are given excellent opportunity to learn some lessons that would otherwise be possible for only a few and at great expense to them. Education along the right lines is far better than laws which seek to compel although the latter are of course necessary. It is the same with physical and moral health. Teach the people how to live and act for their own best interests and they will come nearer observing the proper laws than in the case of observing the "thou shalt not" variety.—Fort Myers Press.

UNSCREENED CLOSETS

And again we are calling your attention to those unscreened closets that exist in violation of both city and state law. They menace not only the lives of the members of your own family, but those of the whole city. And there is no excuse for their existence. Better shut them up before hot weather comes on.—DeFuniak Breeze.

FLIES IN RESTAURANTS AND HOTELS

Restaurants or hotels in Miami in which flies are found are operating in direct violation of the city health ordinances. We have never seen a policeman, however, march in and place the offenders under arrest. The fly carries typhoid fever, tuberculosis, and many other terrible diseases, and the strictest regulations should be enforced against them.—Miami Metropolis.

Veterinary Notes

TICK QUARANTINE

Nearly 10,000 Square Miles in Florida, Texas, Mississippi, Georgia and South Carolina Released

A total area of 9,739 square miles was released from quarantine on account of the cattle tick on March 10. The free territory is situated in the States of Florida, Texas, Mississippi, Georgia and South Carolina, and includes the whole or parts of 16 counties. There have now been released from Federal quarantine 284,521 square miles of the original 728,543 which were put under quarantine in 1906, when the work of systematic tick eradication was begun.

FLORIDA BEGINS FIGHT

A significant feature of the new order is that with the release of territory in Florida there is now no tick-infested State in which some counties have not been made free of the pest. In Florida the whole of Dade and Broward Counties and part of Palm Beach County are now tick free. The Florida work began in 1914, when a number of prominent farmers, cattle owners, and business men held a meeting in the courthouse in Miami on November 25 and formed an organization for the extermination of the cattle tick. Twelve men, owning 218 dairy cattle, enrolled in the new organization, which later became known as the Stock Growers' Association of Southeast Florida. The membership fee was fixed at \$1, but voluntary contributions aggregating \$271 were obtained in a short time. This was supplemented by a county appropriation of \$500 and a campaign against the tick was begun. A survey of the territory showed that there were about 850 cattle, principally dairy cows, in the county. The State live stock sanitary officials and the department were called upon for assistance, five dipping vats were built, and on May 8, 1915, regular dipping began. By December 1, 1915, the membership in the stock growers' association had increased to 155, the members of the association owning between them nearly three-fourths of the cattle in the county.

From May, 1915, when, as has been said, regular dipping began in Dade County, until the present time not a single cow has been lost from tick fever and over 200 head of pure-bred dairy cattle have been imported. Previous attempts to import dairy stock had invariably resulted in failure, for the cattle succumbed to fever. This represented a serious loss to the community, for the large winter resorts along the eastern coast of Florida offered an excellent market for milk, cream, and butter, and to obtain the maximum returns from this market it was most desirable to grade up the native herds by the importation of pure-bred stock.

Now that the tick has been driven out from Dade and Broward Counties there is no reason why this grading-up process should not go on rapidly. The work of freeing these counties from the tick has cost citizens, county, and State about \$1,600. This sum is regarded as insignificant in comparison with the increased revenue which better dairy herds will bring the community.

INTEREST IN TEXAS

The release of Schleicher County, in the western part of Texas, is also regarded as an encouraging forerunner of successful work in that State this year. A number of counties are showing their interest in tick eradication by making appropriations of from \$5,000 to \$10,000 for the vigorous prosecution of the work this season. It seems to be very generally recognized that the most successful and most economical way of freeing the county from ticks is to make dipping vats readily accessible to every part of the county and then to insist that all cattle be dipped regularly every

two weeks for one season. This, of course, requires some outlay in the beginning, but in the end is far cheaper than attempts to accomplish the work with insufficient equipment.

In the other States affected by the new order, Mississippi, Georgia and South Carolina, tick eradication has made great progress in recent years. Much of South Carolina has already been freed, and in both Georgia and Mississippi the realization of the benefits of the work is spreading rapidly.

The areas released on March 10 are as follows:

State and County	Area released
Florida:	<i>Sq. mi.</i>
Dade (all).....	2,000
Broward (all).....	1,200
Palm Beach (part).....	600
Total.....	3,800
Texas:	
Schleicher (all).....	1,387
Mississippi:	
Winston (all).....	597
Yalobusha (remainder).....	160
Newton (remainder).....	318
Total.....	1,075
Georgia:	
Clayton (all).....	142
Hancock (all).....	530
Pickens (all).....	231
Wilkes (all).....	458
Lumpkin (part).....	150
Total.....	1,511
South Carolina:	
Calhoun (all).....	391
Saluda (all).....	435
Lexington (all).....	833
Florence (remainder).....	207
Total.....	1,866
North Carolina:	
Northampton (part).....	100
Total area released.....	9,739

From Weekly News Letter, U. S. Dept. Agri., March, 1916.

LICE ON HOGS

Parasites Suck Blood and Lower Vitality—Dipping and Disinfection Are Control Methods

The farmer should frequently examine his hogs about the ears, flanks and inside of the legs to see if they are lousy. Lice are common pests among swine, and vigorous and persistent treatment is required to eradicate them. They may be readily seen traveling among the bristles, particularly in the parts just mentioned. The eggs, or "nits," are small white oval bodies attached to the bristles. Dipping does not as a rule destroy the

vitality of these eggs. Swine should be dipped frequently in order to kill the lice that hatch out of the eggs after the previous dipping. These lice are blood-sucking parasites, and by biting the hog and sucking blood they cause a great deal of skin irritation. Furthermore, they act as a drain on the vitality of the hog, through the loss of blood which they abstract. When lousy the hog is usually restless and rubs on posts and other convenient objects. The coat looks rough and harsh. This pest is transmitted from one animal to another by direct contact, or by contact with infected bedding or quarters.

DIPPING SWINE

To free hogs from lice they should be dipped two or more times at intervals of about two weeks. Several dippings may be required before complete eradication is accomplished. Do not fail at the same time to clean and disinfect thoroughly the sleeping quarters. Cresol compound (U.S.P.) may be used for dipping and disinfecting. For dipping, mix in the proportion of 2 gallons to 100 gallons of water; for disinfecting, in the proportion of 3 gallons to 100 gallons of water. Although not always as effective as might be desired, coal-tar products of the kind ordinarily sold as stock dips are commonly used to treat hogs for lice. For use they are diluted with water in accordance with directions supplied by the manufacturers. Cresol compound and coal-tar dips may be purchased at the drug store.

Dipping vats are made of various materials, but the most durable is cement. (See Farmers' Bulletin 481, Concrete Construction on the Live Stock Farm). The vat should be set in the ground at a convenient place where there is good surface drainage away from the vat. A suitable size for a vat in which to dip hogs is 10 feet long at the top, 8 feet long at the bottom, 1 foot wide at the bottom, and 2 feet wide at the top. It should be deep enough so that the hogs will be completely immersed in the dip and will not strike the bottom of the vat when they plunge. If possible, the vat should be located so that a 2-inch drain pipe may lead from the bottom of the vat to facilitate emptying and cleaning, otherwise it is necessary to pump or dip out the contents of the vat in order to clean it. Do not use old filthy dip, but clean and recharge the vat before dipping again if the dip has become very dirty or if it has stood a long time in the vat. The end where the hogs enter should be perpendicular and the entrance should be on a slide. The other end should slope gradually, with cleats to provide footholds for the hogs for emerging after dipping. A dipping vat is very useful wherever a large number of hogs are kept.

HOG WALLOWS

Some farmers favor hog wallows; others are strongly opposed to them. Filthy hog wallows are a source of danger. Hogs wallowing in or drinking contaminated water are likely to contract disease. However, there are many advantages to be derived from wallows. A cool bath is very soothing to a hog during the hot weather. It cleans the scurf from the skin and protects the hogs from flies. Crude oil, sufficient to form a thin layer on top of the water, may be poured into the wallow about every 10 days. This will tend to keep the hogs free from lice and other skin parasites. If the skin becomes irritated from the oil, its use should be discontinued. Small quantities of coal-tar dip are sometimes added to the water in hog wallows, but there is an element of danger in this practice, as poisoning may result from the absorption of phenols by hogs which lie in the wallow more or less continuously.

On some of the larger hog farms concrete wallows are becoming popular. The cement hog wallow should be located in a shady place and made so as to contain from 8 to 10 inches of water. A 2-inch drain pipe, as recommended for the dipping vat, should be placed in the bottom of the wallow to permit its being cleaned out.

OTHER METHODS

In many cases a farmer is not financially able to build a concrete hog wallow or a dipping vat. If this be the case, the dip, properly diluted accord-

ing to directions, can be applied with a spray pump or sprinkling can, or else rubbed on every part of the hog by means of a brush or a swab of cotton waste. Care should be taken not to apply the dip stronger than directed.

Another method of controlling lice is to tie gunny sacks or similar coarse cloths around a post and saturate the sacks frequently with crude oil. The sacks should be tied at a proper height so that the hogs may rub against them.

CHANGE PASTURES FREQUENTLY

Swine can be raised when they are confined in limited quarters if the quarters are kept clean, but they will do much better and stay in better health if they have plenty of pasture. Divide the pasture into convenient areas, so that the hogs can be shifted from one pasture to another. This not only provides fresh pasture, but affords an opportunity to disinfect the pastures by plowing and reseeding or exposure to the sun and weather. Intestinal worms, which are rather common in swine, are contracted from feed, water, and ground which have been contaminated by the droppings from infected hogs. Frequent change of pasture is one of the best means of reducing worm infestation to a minimum. Hogs, however, should not be allowed to run at large on open range, as this favors the spread of hog cholera.—From "Weekly News Letter," U. S. Dept. Agri., April, 1916.

GUARDING MEAT SUPPLY

"More than 58,000,000 meat animals were slaughtered in establishments under Federal inspection during the fiscal year ending June 30, 1915. Since approximately from 58 to 60 per cent of the animals killed in the country are slaughtered in establishments where Federal inspection is maintained, it appears that about 100,000,000 meat animals are now being killed each year in the United States.

Of the animals subjected to Federal inspection, 299,958 were condemned as unfit for human use and 644,688 were condemned in part. Thus a little more than 1½ per cent of all animals inspected were condemned either in whole or in part. These figures include only cattle, calves, sheep, goats and swine.

Tuberculosis was the chief cause of the condemnations. More than 32,644 carcasses of cattle and 66,000 carcasses of swine were entirely rejected on account of this disease, and in addition parts of 48,000 cattle and 440,000 swine. Hog cholera was responsible for the next largest loss, nearly 102,000 swine being condemned entirely on this account.

The annual appropriation for the Federal meat inspection service is now about \$3,375,000, so that the cost to the people would be between 5 and 6 cents per animal if the service was confined entirely to the inspection of the animals and carcasses. In addition, however, great quantities of the meat and products are reinspected. In this item there was a very considerable increase during the last fiscal year, the reinspection resulting in the condemnation of a total of nearly 19,000,000 pounds of products of one kind or another. Furthermore, 245,000,000 pounds of imported meat or meat products were inspected and more than 2,000,000 pounds condemned or refused entry.

In the course of its work, the Bureau of Animal Industry, which is in charge of the meat inspection service, has discovered a new method of destroying trichinae in pork, which is an additional safeguard to human health. Refrigeration at a temperature of 5 degrees F., or lower, for a period of 20 days will destroy these parasites, which occasionally give rise in human beings to the serious disease known as trichinosis. Hitherto the only known safeguard against this disease has been thorough cooking of all pork and pork products, and those persons who neglect this precaution have always been more or less exposed to the danger. Unless pork is known to have been subjected to refrigeration as above indicated, it should be thoroughly cooked."—"Weekly News Letter," U. S. Department of Agriculture.

Summary of Public Health Administration, March

SOUTHWESTERN DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Supervision of inspections by sanitary patrolman.

Hillsborough County: Investigation of cesspool nuisance.

Clearwater: Sanitary inspection of town; conferences with city physician and mayor. Investigation and inspection in regard to screening laws. All stores, fruit stands and eating places inspected.

Largo: Sanitary inspection of town. Conferences with mayor and local physicians in regard to public health. Inspection of all eating places in connection with screening law.

Jackson Heights: Inspection of school. Copy of law in regard to school privy sent to trustees of school. School privy ordered placed in good sanitary condition.

Wauchula: Investigation smallpox outbreak, cases visited with attending physician. Advice given regarding vaccination and management.

Tarpon Springs: Sanitary inspection of city. Interview with mayor. Conference with city health officer. Inspection of all commercial houses in connection with screening law. Inspection of Greek settlement.

Fort Meade: Inspection of town for sanitation and screening laws. Interview with town clerk in regard to enforcement of screen law. Conference in regard to health conditions.

Lake Thonotosassa and Idle While Park: Inspection of rural schools at Lake Thonotosassa and Idle While Park. Photograph taken of Idle While Park privy in unsanitary condition. Matter taken up with trustees of both schools.

Lakeland: Inspection of city. Leading stores inspected and matter taken up by mail enclosing copy of state screening laws. Conference with city health officer.

Safety Harbor: Inspection of city. Schools and stores inspected for screen and surface closet laws. Interviews regarding health conditions.

Heidelberg Heights: Rural school inspected; matter taken up with trustees of school.

Dunedin: Inspection of reported smallpox at request of mayor; found to be chickenpox.

Pembroke: Investigation of suspected smallpox cases. Conference with superintendent of mines; advice given as to procedure and vaccination; vaccination. Interview with attending physician.

Homeland: Inspection rural school; found to be in bad condition; matter taken up with trustees. Inspection boarding house not complying with screening law; matter taken up with owner. Copies of screening and surface closet laws sent to respective parties.

Lake Magdelene: Inspection and investigation suspected smallpox cases; found to be chickenpox. Inspection of school; matter taken up with superintendent of public instruction by mail.

Punta Gorda: Investigation stable complaint; matter taken up with owner, and correspondence.

Bartow: Sanitary inspection of city. Inspection of stores for screening law; also, all restaurants, hotels and eating places. Matter taken up by mail, enclosing copy of law to all places not complying.

Dunedin: Second visit. Inspection of Imhoff tank; conference with chairman of city council.

WESTERN DISTRICT

Pensacola: Routine work assistant to the State Health Officer. Supervision of inspections by sanitary patrolman and management of communi-

cable diseases as follows: Screening Law—boarding houses 1, restaurants 3, lunch counters 4, meat shops 3, grocery stores 2, fruit stands 6. Surface closet and water carriage laws—private residences 15. Communicable diseases—typhoid fever 8, tuberculosis 1, diphtheria 1. Violations of sanitary laws ordered abated.

SOUTH TROPIC DISTRICT

Key West: Routine work assistant to the State Health Officer. Supervision of inspections by sanitary patrolman. Investigations of complaints and nuisances made. Toilet system of building inspected, and recommendations made. Children suspected of having contagious disease examined at public school. Examination made for leprosy; pronounced negative after physical examination. Leper located and isolated in his premises. Question of dipping vat for cattle taken up with dairymen. Ordinance regulating sale and production of milk in city of Key West drawn up and presented to Chairman Sanitary Committee for introduction in city council. Routine laboratory work.

SOUTH CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer. Consultation with local physician in diagnosis suspicious skin eruption; diagnosis impetigo contagiosus. Aboard health exhibit train while located in Ocala.

Marion County: Smallpox in negro at lumber camp 19 miles from Ocala; vaccination of contacts and others.

Sanford: Investigation outbreak diphtheria; 4 cases reported; inspection of throats in children in schools; specimens taken from all suspicious throats; no new cases reported. Assistance in final examination of babies for the Woman's Club Better Babies Contest.

Taft: - Investigation reported smallpox at turpentine still 7 miles from Taft; found to be chickenpox.

CENTRAL DISTRICT

Gainesville: Routine work, office of Assistant to the State Health Officer. Micanopy, Hawthorne, Waldo, Alachua, High Springs, Newberry, Archer, Trenton: Series of lectures on Hygiene given to high schools.

Trenton: Investigation sanitary nuisance. Inspection of school privies; abatement.

Fairbanks: Investigation typhoid fever.

Lake Butler: Sanitary survey of town.

Sapp: Investigation sanitary nuisance.

Arredondo: Investigation diphtheria case.

Raiford: Investigation sanitary nuisance.

Greenville, Aucilla, Monticello and Jefferson County: Investigation smallpox.

Tallahassee, Madison, Quincy, Cottondale, Fountain, Panama City, St. Andrews, Millville, Moortown, Southport, Lynnhaven, Farmdale, Bellisle, Early, Overstreet: General inspection trip of Tallahassee Sanitary District. Inspection of Bay County with reference to prevalence of pellagra.

EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer.

West Palm Beach: Inspection of county convict camp. Perfecting arrangements for assistance in Baby Week campaign; lecture; examination of babies at conference; scoring baby cards.

Delray: Assistance in preparation of sanitary ordinance upon invitation of city health officer. Conference with registrar of vital statistics.

Lake Worth: Interview with city clerk (registrar of vital statistics).

Jacksonville: Conference with State Health Officer, Statistician of the State Board of Health, and Attorney of State Board of Health.

Hawk's Park: Investigation reported typhoid fever.

New Smyrna: Inspection of grocery stores and fruit stands and meat shops; attention called to violations of screening law were found.

Russell: Investigation cases alleged smallpox; diagnosis chickenpox.

WEST CENTRAL DISTRICT

Tallahassee: Office closed on account resignation.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during March: Jacksonville, Raiford, Lake Butler, Gainesville, Rochelle, Micanopy, Evinston, McIntosh, Reddick, Kendrick, Ocala.

Total number towns visited January 1 to April 1, 1916..... 64

PUBLICITY AND PUBLICATIONS

Monthly Bulletin "Health Notes," Vol. XI, No. 3, March, 1916, pp. 32.
Press service bulletins to Florida newspapers: March 1, "Handkerchiefs;" March 8, "Public Health and the Negro;" March 15, "Is It a Useless Law;" March 22, "Mutual Responsibility;" March 29, "Typhoid and the Fly."

Publications out in March: None.

Distribution of literature during March:

Mailed upon request.....	1,927
Distributed on Educational Health Exhibit Train.....	5,220
Press service bulletins to Florida newspapers: (5 issues).....	1,375
Health Notes, March, mailing list.....	10,050

Total pieces distributed.....18,572

Number pieces literature distributed January 1 to April 1, 1916.....51,004

SMALLPOX

Reported cases of smallpox in Florida, March, 1916:

Greenville, Madison County.....	2
Key West, Monroe County.....	1
Leesburg, Lake County.....	3
Ocala (outside), Marion County.....	4
Port Tampa, Hillsborough County.....	1
Tampa, Hillsborough County.....	1
Wauchula, DeSoto County.....	10
Total	22
Total number cases reported in 1916 to April 1.....	57

DISTRICT TUBERCULOSIS NURSE INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, March 31, 1916

<i>Residence of Cases Visited to Date by Districts</i>	<i>Total Number of Patients Under Instruction Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Patients in Districts Under Instruction to Date</i>	<i>Total Number of Patients Following Instruction</i>
Western	113	35	14	13	1	120	40
Southwestern	167	35	7	8	3	184	131
North Central	244	33	5	12	..	260	103
West Central	172	18	10	11	2	167	90
East Coast	290	66	20	18	6	312	312
Total for State.....	986	187	56	62	12	1,043	676

BIOLOGICAL PRODUCTS

Distribution of Biological Products during March (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only). Number of persons receiving treatment:

County and Town	Anti-Smallpox Vaccine	Anti-Rabic Vaccine	Anti-Typhoid Vaccine	Diphtheria Antitoxin Curative and Immunizing	Tetanus Antitoxin Immunizing
ALACHUA					
Archer	50	..	..	..	..
Gainesville .....	..	..	..	1	..
DeSOTO					
Wauchula	40	..	..	..	..
DUVAL					
Jacksonville	61	..	..	4	..
South Jacksonville	40	..	..	..	..
ESCAMBIA					
Pensacola	40	..	12	..	..
HAMILTON					
Jasper	10	..	..	..	..
White Springs	10	..	..	..	..
HILLSBOROUGH					
Ft. DeSoto	75	..	..	..	..
Tampa	50	..	..	..	..
LAKE					
Leesburg	20	..	..	..	..
LEVY					
Cedar Keys .....	..	1	..	..	..
MADISON					
Greenville	10	..	..	..	..
Madison .....	..	..	..	4	..
MARION					
Ocala	180	..	..	..	..
MONROE					
Key West	100	..	..	..	..
NASSAU					
Fernandina	20	..	..	..	..
PINELLAS					
Dunedin	30	..	..	..	..
Tarpon Springs .....	..	..	..	1	..
PUTNAM					
Welaka	20	..	..	..	..
SEMINOLE					
Chuluota	20	..	..	..	..
Sanford	40	..	..	2	..
SAINT JOHNS					
St. Augustine	220	..	..	..	..
TAYLOR					
Springdale	10	..	..	..	..
VOLUSIA					
Daytona	10	..	..	1	..
DeLand	10	..	..	..	..
Total	1,066	1	12	13	..
Total number persons receiving anti-smallpox vaccine in 1916 to April 1.....	2,335				
Total number persons receiving Pasteur treatment in 1916 to April 1.....	7				
Total number persons receiving anti-typhoid vaccine in 1916 to April 1.....	25				
Total number persons receiving diphtheria antitoxin in 1916 to April 1.....	41				
Total number persons receiving tetanus antitoxin in 1916 to April 1.....	..				

CRIPPLED CHILDREN

NAMES		In St. Lukes 3-1-16	In Brewster (Col.) 3-1-16	Outside Treatment 3-1-16	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment	Examined, Not Admitted	Total Cases During Month		Date Discharged and Condition	Diagnosis	Under Treatment April 1st, 1916
A. F. M.	N. P. M.	1	1							1		Died 3-1-16.....	Tbc. Spine.....	
H. M.	M. P.	1	1							1	Cast 24th.....	Tbc. Hip.....	Tbc. Hip.....	1
L. W.	H. P.			1						1	In braces 3-27-16.....	Tbc. Ilium.....	Lat. Curv. Spine.....	
B. W.	Y. W.			1						1	Cured 15th.....	Club Feet.....	Club Feet.....	
R. K.	W. Y.			1						1		Moved away 1st.....	Polio. Paralysis.....	Polio. Paralysis.....
O. D.	D. W.	1	1							1	Cast 28th.....	Moved away 1st.....	Club Feet.....	Club Feet.....
D. W.	D. W.	1	1							1			Deformity S.Par.....	Deformity S.Par.....
F. B.	H. B.	1	1							1	Brace and Shoe 25th.....		Tbc. Spine.....	Tbc. Spine.....
W. H.	S. B.	1	1							1	Cast 10th.....	Improved 3-29-16.....	Club Feet.....	Club Feet.....
										1	Tenotomies & tendon 7th transplantation.....		Ankylosis Knee.....	Ankylosis Knee.....
F. M.	A. P.		1							1	Cast 22nd.....		Osteomyelitis.....	Osteomyelitis.....
L. P.	S. S.			1						1	Daily dressings.....		Polio. Paralysis.....	Polio. Paralysis.....
W. C.	C. DuB.			1						1	Tenotomies & Cast 25th.....	Not Admitted.....	Bow Legs.....	Bow Legs.....
H. R.				1						1	Exam. by Drs. Randolph and Heggie.....		Osteomyelitis.....	Osteomyelitis.....
										1	Cast 29th.....	Not Admitted.....	Club Foot.....	Club Foot.....
										1			Cerebral Tumor.....	Cerebral Tumor.....
										1			Tbc. Hip.....	Tbc. Hip.....
Total		7	1	7	4					1	20	7		13

BACTERIOLOGICAL LABORATORIES
SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Total
Animal Parasites.....	185	100	17	2	13	317
Diphtheria	218	86	10	2	25	341
Gonorrhoea	87	69	65	2	11	234
Malaria	177	120	25	1	20	343
Pathological	15	12	1	..	..	28
Rabies	9	..	..	..	..	9
Tuberculosis	203	98	46	7	20	374
Typhoid	192	110	58	..	24	384
Water: Bacterial Ex.....	46	13	..	2	36	97
Wasserman	157	72	12	..	18	259
Miscellaneous	47	10	27	1	66	151
	1,336	690	261	17	233	2,537

Total number of specimens examined by the Laboratories of the State Board of Health,
of Florida, during March, 1916.....2,537

Tallahassee Laboratory closed during March.

TOWN

TOWN	Diphtheria	Gonorrhea	Etioloautumnal	Quarlan	Tertian	Species Not Determined	Typhoid	Tuberculosis	Uncinaria	Ascariis	Oxyuris	Trichiuris	Tapeworm	Rabies	Wasserman	Total
Apopka	1	..	..	..	..	..	..	..	..	1
Arcadia	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Avon Park	2	..	..	..	..	..	..	2
Blichton	1	..	..	..	..	..	..	..	..	1
Boca Grande	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Bowling Green	1	..	..	..	..	..	..	..	..	1
Bradentown	1	..	..	..	..	..	..	..	..	1
Bunnell	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Campbellton	3	..	..	..	..	..	..	3
Cedar Key	1	..	1
Chattahoochee	1	1
Citra	1	..	1	..	..	..	..	..	..	1
Clearwater	1	..	..	..	..	..	..	..	..	1
Cocoanut Grove	1	..	..	..	..	..	..	..	..	1
Dade City	1	..	..	..	..	..	..	..	..	1
Daytona	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2
Delray	1	..	..	..	..	..	..	..	1
Fellsmere	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	2
Fernandina	1	..	..	..	1	..	..	2
Ft. Dade	1	..	..	..	..	..	..	..	..	1
Ft. Myers	3	..	..	..	..	..	..	..	..	3
Gainesville	1	..	..	..	..	..	..	3	..	..	..	..	..	..	..	4
" Release Cult.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Graceville	1	..	..	..	..	..	..	..	1
Grandin	2	..	..	..	..	..	..	2
Hawks Park	1	..	..	..	..	..	1
Hawthorn	1	..	..	..	..	..	..	..	..	1
Jacksonville	8	25	..	..	..	..	13	23	8	1	..	..	1	2	30	111
" Release Cult.	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
South Jacksonville	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Jasper	1	..	..	..	..	..	..	..	1
Key West	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	2
Kissimmee	1	..	..	..	..	..	..	..	1
Lake Butler	1	..	..	..	..	..	..	..	..	1
Lake City	1	1	..	..	..	..	..	..	..	2
Lakeland	1	..	..	..	..	..	..	..	..	1
Leesburg	1	..	..	..	..	..	..	..	..	..	1
Malone	1	..	..	..	..	..	..	..	1
Mandarin	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1

(MALARIA)

TOWN	Diphtheria	Gonorrhea	Etiocautummal	Quarant	Tertian	Species Not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Oxyuris	Trichurias	Tapeworm	Rabies	Wasserman	Total
Mary Esther									2							2
Melbourne		1														1
Melrose	1							1								2
Micanopy							1									1
Miccosukee								3	5			4				9
Miami		2					3	3	2						7	17
Milton		1														1
Monticello									1							1
Mulberry									1							1
New Smyrna		1					2		4					1		8
Ocala								2	1							3
Odessa								1								1
Ojus												1	1			2
Okeechobee									6							6
Orlando		2						2								4
Oxford									1							1
Palatka									1							1
Pensacola		27				1	7	9	8							52
Plant City					1		2								1	4
River Junction		1							1							2
St. Augustine							1	2	2							5
Sanford		5							3						1	9
Sarasota		1														1
Tallahassee		1					1		1							3
Tampa		6	19		3	1	8	7	7	2		3			13	69
West Tampa										2		3				5
Tarpon Springs		1														1
Titusville		2	1													3
" Release Cult.		2														2
Trenton		1														1
Wauchula		1														1
West Palm Beach							2	1								3
Williston							1		5							6
Winter Haven		1							1							2
Worthington							2		1							3
Total	33	91			4	2	58	60	73	5	1	11	3	4	53	398

VETERINARY DIVISION

TICK ERADICATION

Cattle dipping vats reported constructed during March, 1916.....00

Total number of vats reported constructed to April 1, 1916.....90

INTRASTATE SHIPMENTS OF DIPPED CATTLE INTO DADE AND BROWARD COUNTIES

March 5, Fort Pierce to Miami for immediate slaughter.....	35	cattle
March 8, Fort Pierce to Miami for immediate slaughter.....	30	cattle
March 12, Fort Pierce to Miami for immediate slaughter.....	33	cattle
March 13, Kissimmee to Perrine.....	8	mules
March 16, Fort Pierce to Miami for immediate slaughter.....	34	cattle
Totals: cattle, 132; mules, 8.....	140	
Total number of shipments.....	5	

GLANDERS

Diagnosed by Veterinarian during March, 1916:

Orlando, Orange County.....1 horse, \$75.00

Total number of cases in 1916, to April 1.....3

IMPORTATION OF CERTIFIED LIVE STOCK INTO FLORIDA

March 1,	Chicago, Ill., to Pensacola.....	1 horse	20 mules
March 1,	Chicago, Ill., to Ponce de Leon.....	17 horses	7 mules
March 3,	Milton, Tenn., to Marianna.....	2 horses	18 mules
March 4,	Murfreesboro, Tenn., to Tallahassee.....	1 hog	
March 4,	Atlanta, Ga., to Lake City.....	6 horses	8 mules
March 6,	Kentucky to Brownville.....	3 hogs	
March 6,	Versailles, Ky., to Monticello.....	1 hog	
March 6,	Pulaski, Tenn., to Wildwood.....	1 hog	
March 7,	Valdosta, Ga., to Jacksonville.....	1 horse	
March 8,	York, Ala., to Tampa.....	22 cattle	
March 8,	Atlanta, Ga., to Jacksonville.....	9 horses	16 mules
March 8,	Atlanta, Ga., to Jacksonville.....		5 mules
March 8,	Falfurrias, Tex., to Tallahassee.....	1 cow	
March 9,	Chattanooga, Tenn., to Oakland.....	3 hogs	
March 9,	Chattanooga, Tenn., to Arcadia.....	2 hogs	
March 10,	Atlanta, Ga., to Green Cove Springs.....	1 hog	
March 10,	Atlanta, Ga., to Glen St. Mary.....	1 hog	
March 10,	Humphrey, Mo., to Waverly.....		2 mules
March 10,	Enville, Tenn., to Telogia.....	2 hogs	
March 14,	Shelbyville, Tenn., to Tampa.....	1 hog	
March 14,	Shelbyville, Tenn., to Trenton.....	1 hog	
March 14,	Gleason, Tenn., to Hypoluxo.....	1 hog	
March 15,	Atlanta, Ga., to Jacksonville.....		14 mules
March 17,	Atlanta, Ga., to Palatka.....	7 horses	13 mules
March 17,	Dupont, Ga., to Dade City.....	1 horse	
March 17,	Tingwood, Ill., to Jacksonville.....	2 cattle	
March 19,	Thomasville, Ga., to Tampa.....	14 cattle	
March 19,	Atlanta, Ga., to New Smyrna.....	4 horses	2 mules
March 19,	Atlanta, Ga., to Lake City.....	1 horse	4 mules
March 19,	Ft. Worth, Texas, to Lakeland.....	19 horses	8 mules
March 20,	Valdosta, Ga., to Floral City.....		1 mule
March 21,	Havana, Cuba, to Key West.....	4 horses	
March 22,	Havana, Cuba, to Key West.....	2 horses	
March 22,	Devils Lake, N. Dakota, to Gardner.....	1 cow	
March 22,	Enville, Tenn., to Tampa.....	3 hogs	
March 24,	Havana, Cuba, to Key West.....	1 horse	
March 25,	Nashville, Tenn., to Pensacola.....	1 horse	
March 25,	Martinsville, Ind., to Pensacola.....	1 cow	
March 27,	Versailles, Ky., to Evanston.....	2 hogs	
March 27,	Fayetteville, Tenn., to Marianna.....	1 hog	
March 28,	Hot Springs, N. C., to Avon Park.....		1 mule
March 29,	Greens, Ala., to Pensacola.....	2 horses	
March 30,	Moore, Idaho, to Sanderson.....	5 cattle	
March 30,	Milton, Tenn., to Marianna.....	7 horses	13 mules
March 31,	Kentucky to Bagdad.....	5 hogs	
Totals: horses, 85; mules, 132; cattle, 46; hogs, 29.....		292	
Total number of shipments.....		45	

EXPORTATION OF CERTIFIED LIVE STOCK FROM FLORIDA

March 3,	Jacksonville to Wilcox, Arizona.....	9 hogs	
March 10,	Jacksonville to Boston, Mass.....		1 horse
March 24,	Jacksonville to Kansas City, Mo.....		2 horses
March 30,	Ormond to Wilkes-Barre, Pa.....		6 horses
Totals: horses, 9; hogs, 9.....		18	
Total number of shipments.....		4	

HOG CHOLERA AGENTS APPOINTED DURING MARCH, 1916

O. W. Caswell, Live Oak, Suwannee County.

HOG CHOLERA SERUM DISTRIBUTED, MARCH, 1916

	C. C. Serum Distributed
Alachua	13,700 c.c.
Baker .....	..... c.c.
Bay	1,000 c.c.
Bradford	14,900 c.c.
Brevard .....	..... c.c.
Broward .....	..... c.c.
Calhoun	9,400 c.c.
Citrus	4,050 c.c.
Clay	9,850 c.c.
Columbia	500 c.c.
Dade .....	..... c.c.
DeSoto	5,900 c.c.
Duval	2,800 c.c.
Escambia	300 c.c.
Franklin .....	..... c.c.
Gadsden	7,550 c.c.
Hamilton	4,500 c.c.
Hernando	3,650 c.c.
Hillsboro	12,000 c.c.
Holmes	6,350 c.c.
Jackson	11,700 c.c.
Jefferson	6,250 c.c.
LaFayette	1,000 c.c.
Lake	1,650 c.c.
Lee	1,000 c.c.
Leon	1,500 c.c.
Levy	5,200 c.c.
Liberty	4,350 c.c.
Madison	8,700 c.c.
Manatee	900 c.c.
Marion	17,800 c.c.
Monroe .....	..... c.c.
Nassau .....	..... c.c.
Orange	2,350 c.c.
Osceola	500 c.c.
Palm Beach .....	..... c.c.
Pasco .....	..... c.c.
Pinellas .....	..... c.c.
Polk	1,850 c.c.
Putnam	500 c.c.
Santa Rosa	250 c.c.
Seminole .....	..... c.c.
St. Johns	400 c.c.
St. Lucie .....	..... c.c.
Sumter	500 c.c.
Suwannee	13,750 c.c.
Taylor	1,550 c.c.
Volusia	900 c.c.
Wakulla	1,000 c.c.
Walton	3,000 c.c.
Washington	4,600 c.c.
Total sold, 6,250 c.c.	Total, 187,700 c.c.

Estimated number of hogs treated, March.....	8,531
Estimated weight of hogs treated, March.....	520,341 lbs.
Amount of hog-cholera serum purchased during March.....	200,000 c.c.
Cost of serum purchased during March.....	\$1,400.00
Amount of serum distributed in 1916, to April 1.....	430,300 c.c.
Estimated number of hogs treated in 1916, to April 1.....	20,342
Estimated weight of hogs treated in 1916, to April 1.....	1,236,873 lbs.
Cost of serum purchased in 1916, to April 1.....	\$2,900.00

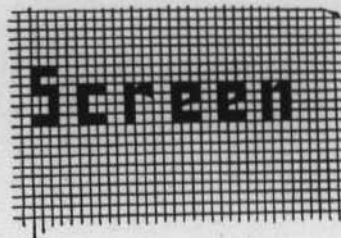
DETAILS PERFORMED BY THE VETERINARY DIVISION

March 1-4, demonstration of dipping of cattle at Grand Ridge; March 5-7, investigating disease in cattle at Lake Worth; March 10, testing 14 head mules at Lake City; March 10, testing 4 calves and 1 horse at Jacksonville; March 14-15, investigating glanders at Orlando; March 20, investigating hog disease at Floral City; March 20, investigating glanders at Jacksonville; March 25, ten mules inspected for shipment to Grant.

YES OR NO ?



—
MINUS



==
EQUALS



SOME FOLKS WOULD
NOT BE AFRAID OF
THIS IF IT WERE SO
LABELED—

— — BUT — —

WOULD THEY VENTURE
TO DRINK THIS MILK
IF THEY SAW IT
GREATLY MAGNIFIED?

EVANOSTEN 16.

P.H.R.



Bureau of the Public Health Service
JUN 26 1916

HEALTH NOTES

OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

STATE BOARD OF HEALTH

ENTERED AS SECOND CLASS MATTER, FEBRUARY 17, 1915
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Vol. XI

May, 1916

No. 5 (New Series)

HON. FRANK J. FEARNside, President
Palatka, Fla.

HON. S. R. MALLORY KENNEDY, M. D.
Pensacola, Fla.

HON. C. G. MEMMINGER
Lakeland, Fla.

EDITED BY

JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

EXECUTIVE OFFICE

State Board of Health Building, Springfield Boulevard
Jacksonville

BRANCH OFFICES

ASSISTANTS TO THE STATE HEALTH OFFICER

Tampa	Key West	St. Augustine
Pensacola	Gainesville	Ocala

AGENTS

Miami	Fernandina	Palatka
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BACTERIOLOGICAL LABORATORIES

CENTRAL LABORATORY

Jacksonville

BRANCH LABORATORIES

Tampa	Pensacola	Miami
Tallahassee	Key West	

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
 Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
 Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
 Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
 Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
 Publication 89, Hog Cholera, January, 1912, pp. 12.
 Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
 Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
 Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
 Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
 Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
 Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
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HATS OFF, GENTLEMEN

By DR. CHARLES E. BANKS, Senior Surgeon,
• U. S. Public Health Service

If the crowning glory of woman is her hair, the shining reproach to man is his bald pate. Just why man that is born of woman should leave most of the hair of the human race to her takes on the proportion of a mystery until we realize that he does everything possible to ensure this particular distribution of hirsute. Man treats the top of his head as if it were as rare as a cuneiform tablet to be preserved in a glass case, and the result is that he sails under bare polls the most of his adult life. There is no more reason why man should lose the hair of his head prematurely than the beard of his face, but generations of men have been drilled in the whims about the dangers of air and drafts about the head, and as a consequence civilized man wears an impervious hat the larger part of each day. Many are only estopped from wearing it in bed because of the difficulty of adjusting a stiff derby to the pillow. Formerly men wore night-caps lest by any possible means their hair and scalp should have a chance, while they slept, to get the freshening effect of pure air to stimulate its functional activity. Their descendants wear air-tight stoves in the shape of hats now hour after hour in the house, the shop, and at meals. Even in the sanctuary some aerophobiacs will pull on a silk skull-cap to choke off the healthful ventilation of their scalps.

The fruits of this meticulous mollicoddling is seen in the early baldness of the sons of men who have inherited weakened and debilitated scalps, and before middle life a foolishly large proportion of males go glistening through the rest of their careers as bald headed victims, heirs and assigns of the false notion that if one happens to go out of doors without having his head smothered in an air-tight felt covering he will be "liable to ketch cold." The fringe of hair that grows just below the rim of the impinging hat represents the remaining portion of follicles that had a chance to breathe. The reason why we do not see bald-headed women is that they use very little covering on their heads, in any and all weathers, frequently wash the hair and scalp and generally treat their heads as if they were no more "liable to ketch cold" than other parts of their anatomies.

The scalp is now a sort of inherited weak spot in man, a case where continuous over-heating and smothering has choked the life out of his hair follicles, and through disuse as nature's covering the hair has resigned in favor of the hat. Boys of the Blue Coat School in London, by the terms of its foundation and the customs of decades are required to go bare-headed the year round and it is a fine mop of hair that grows to protect their scalps as a consequence. The lesson is easy. Young men in families who have inherited this disfigurement should begin early to go bare-headed and only use hats when strict formality requires it. Daily washing of the scalp in cold weather, without soaps or "lotions" or "restorers" should be employed for the same reason that we wash our faces. Fathers whose ugly, hairless polls are the butt of everybody's jests should see to it that their young sons take early means to forestall this senseless loss of nature's protection and adorn-

ment and start them in life with the habit of going hatless and capless. For some reason these fathers are perfectly willing to let their girls go bare-legged and bare-headed in all weathers and teach the boys to swaddle their tops in tropical turbans. The air is as essential and as harmless to the scalp as to any other part of the body, and it likes to breathe in the oxygen for its rejuvenation, and not smother in its own exhalations under a felt helmet. **HATS OFF, GENTLEMEN!**

INSECT CARRIERS OF DISEASE

By DR. E. G. BIRGE, Assistant Bacteriologist of the State Board of Health

(Read before the Florida State Medical Association, Arcadia, Fla., May 11, 1916)

That insects were considered as possible carriers of disease among the ancients is shown by the fact that in the Sanskrit *Susruta* written 1400 years ago and translated by Sir Henry Blake there is a description of the bites of mosquitoes and their sequelae that can scarcely be equaled today as a thumb nail sketch of malaria or "chills and fever." The extract reads as follows: "Their bite is as painful as that of serpents and causes diseases from the three humors joined together. The bite, as if burnt with caustic or fire, is red, yellow, white and pink in color, accompanied by vomiting, diarrhea, thirst, heat, giddiness, yawning, shivering, hiccup, burning sensation, intense cold, vesicle or pustules increasing, welling knots under the skin, circles, etc." (1)

Guiteras speaks of insect-borne diseases as a singular revival of the crude and direct notions of the people; the fact that disease could be contracted through the external surface of the body was believed in by the ancients and to a certain extent by the people of the middle ages. (2).

About 1887 Theobald Smith proved that Texas fever was transmitted to cattle through the agency of the tick. This was the first disease that was definitely proven to be transmitted by insects, but it was not until about 1894 that it was definitely proven that insects were directly responsible for transmission of human diseases, when two men were infected with malaria by the bite of infected *Anopheline* mosquitoes. These men were Dr. P. T. Manson and George Warren of London working with mosquitoes sent them by Sambon and Low.

Then there followed a great deal of work along these lines until at the present day there is a remarkable group of diseases which are transmitted by insects, among them the most important diseases that affect man. They are filaria, yellow fever, malaria, plague, trypanosomiasis, the spirilloses, Leshmaniasis and, we might include those diseases in which the insect acts as a mechanical carrier only; typhoid fever, the bacillary dysenteries, cholera, tuberculosis, and undoubtedly all other bacterial diseases in which the causal organism is eliminated in any of the body discharges.

One can readily see that insects are extremely important in Public Health work, and that their elimination from direct contact with human beings is desirable not only from an economic standpoint, but from a medical viewpoint as well.

I wish to take up at this time a consideration of the insects which we, as Floridians, are most interested in from a public health viewpoint, and would also mention those insects which we, as medical men, should be familiar with, inasmuch as there is in reality a possibility of our meeting in our practice those tropical and subtropical diseases which they transmit.

Flies are mainly mechanical carriers of disease with the exception of the tsetse fly, the carrier of the African "sleeping sickness" and the phlebotomus flies now definitely considered to carry verruga peruviana and papitaci fever, and some of the smaller flies which cause myiasis in human beings. The flies which we are most familiar with are the house fly (*Musca domestica*) and stable fly (*Stomoxys calcitrans*). Both of these flies breed in organic material, particularly stable manure, and their breeding period during warm weather is from 8 to 10 days. These flies are responsible for the transmission of typhoid fever and the bacillary dysenteries. The methods of preventing transmission of disease by these insects are as follows: Adequate removal of organic material from the home; proper care in storing and getting rid of manure around livery stables; thorough screening of all barns and privies and screening of all doors and windows in human habitations. These measures are directed against the insect itself. The proper disposal of the alimentary discharges from typhoid patients and the isolation of the patient from flies will prevent the spread of the disease, and is not aimed at the insect itself, but at the prevention of contamination of the insect with infected material.

Mosquitoes act as specific carriers of disease. The two principal diseases being malaria and yellow fever. The Anopheline mosquitoes are carriers of malaria; the *Stegomyia fasciatus* or better *Aedes calopus* convey yellow fever; while the Culcidae has been proven to convey the filarial infections and probably these infections are much more common than we as medical men give them credit for being.

The prevention of the mosquito-borne diseases fall into two classes: The eradication of the mosquito by draining swamps filling in low places and getting rid of standing water; and thorough screening of all human habitations. Here too the isolation of infected people from the mosquito will tend to the diminution of these diseases.

Bed bugs with which you are probably all familiar, are flat insects belonging to the genus *Cimex* and are responsible for the transmission of the relapsing fevers found mainly along the Mediterranean Sea. They are of particular interest to us at the present time, inasmuch as a case of relapsing fever has been reported from Colorado due to a spirillum similar to those found in the relapsing fevers mentioned above. This patient is reported to have never lived outside of Colorado, nor to have travelled to any of the countries, to which relapsing fever is particularly peculiar. It is also known that bed bugs may carry other bacterial diseases more or less mechanically as in the case of flies. I doubt if I need to go into the prevention of disease from this source, inasmuch as all people with any regard for personal comfort and cleanliness wage war on this pest.

Another class of insects which I wish to call your attention to, are those known as the lice, more properly speaking the Pediculae, and especially the body lice. (*Pediculus vestimentii*) and the head louse (*Pediculus capitis*). In these days in which the largest part of the world is at war, and in the days which are going to follow the declaration of peace, these insects are going to become more and more of medical importance due to the fact that they transmit typhus fever. America at the present time has sent several expeditions to the war zone with the view of eradicating this disease from the people now engaged in war. The United States troops in Mexico also have to fight this disease, and it is entirely probable that it may be imported from either one of these sources. It is of interest to know that typhus fever is endemic particularly in New York, from which many cases have been reported as Brill's disease. The prevention of disease carried by these insects is perfectly obvious; namely cleanliness of person and clothes. I might also mention another disease which you will not find mentioned in text books, and that is "inefficiency." There is no question but what a person infected with lice of any kind are inefficient due to the irritation and constant worry produced by the bites of these insects.

We have also as carriers of disease the fleas, mainly the rat flea responsible for bubonic plague. At the present time Havana and New Orleans are both fighting this disease among rodents, and it is essential that other communities should take precautions not so much from the fact that bubonic plague may get into the community as through the fact that their host, the rats, cause a vast amount of damage and financial loss in every city. The best adequate prevention of the introduction and spread of this disease is thorough rat proofing and efficient building codes in every municipality. Biologically it is undoubtedly impossible to eliminate the rats entirely from the country, but thorough rat proofing of all buildings within the municipality would tend to cut down the economic damage done by this pest and would tend to prevent the bubonic plague should it ever get into this State due to the lack of breeding places for the rats and consequent diminution of the fleas.

In describing the ticks, I wish to depart somewhat from human medicine, inasmuch as the human disease spread by the ticks does not occur in this section of the country. I am referring now to rocky mountain spotted fever prevalent throughout the mountainous regions of the West. The disease we fight here in Florida is the Texas Fever of cattle which is conveyed entirely by the ticks. The prevention of this disease and consequent economic loss to the community can only be attained by the use of dipping vats and the freeing of the pastures and ranges from these insects so far as possible.

Now, to return again to human diseases, I wish to mention the cockroach, the very common household pest which has been proven to act as a mechanical carrier of disease, notably cholera and typhoid in the far East and the bacillary dysenteries and typhoid in our own country. The fact that these insects will feed on material of an organic nature makes it more than probable that these insects can contaminate any food with the bacillus and hence infect the human being on partaking of such food.

There is one more insect known as the "Cone Nose" or "Big Bed Bug," a biting insect which gained considerable publicity a few years ago under the title of the "kissing bug." It is not known that these insects convey any specific disease, but as they are eaters of carrion, they can cause a general infection by the mechanical transmission of staphylococci or streptococci; and in the medical literature there are a number of cases on record in which people have died from the bites of these insects. Not all of them live on human blood, but at present time one, *Conorhinus sanguisuga*, is apparently developing a taste for human blood and prefers it to other food. It is this insect which has caused the death of two or three people in California from Septicemia.

From this outline it will be seen that insects play a considerable role in the transmission of disease and that we are justified in going to expense for their destruction, not only for the sake of public health, but to prevent the damage occasioned by their depredations. Aside from the purely mechanical methods of combating them, screening and preventing their breeding whenever possible, I would like to mention the fact that our birds play a large role in keeping down the insects of the community; and that their protection should be enforced by law as well as by common consent. Also large numbers of our reptiles such as the toad and frog that live mainly upon insects and numerous snakes that live upon insects should be protected in order to keep down the ever increasing host of insects. It is not only for health reasons but for economic reasons that I wish to impress upon you the importance of insect carriers and I trust that the community at large will be impressed with the importance of adopting all measures which tend towards their eradication, I can say that any community which will take care of its insects properly will reduce the diseases in their community very markedly. It has been proven in those places where a systematic, efficient war has been waged upon the principal insect carriers of disease; namely, flies and mosquitoes.

(1) Castellani & Chambers; Tropical Medicine.

(2) Guiteras; Address Before the Pan-American Scientific Congress, 1916.

SICKNESS CAUSE OF POVERTY

That sickness is the first step leading to dependency and the primary cause of poverty is shown by an investigation recently conducted by the Russell Sage Foundation in New York City. This investigation was made among wage-earners and charity organizations with a view to knowing how frequently is sickness encountered as a factor in dependency. It was found that over 35 per cent. of those in need for aid had been brought to this position through sickness or the responsibility for sickness. Another important fact revealed was that most of the cases studied belonged to the lower branches of labor and that they were here for the reason that either physical or mental deterioration had followed past illnesses. In other words, sickness was found to be a factor producing a low grade of labor as well as dependency.

Of the 687 cases of sickness studied, two-thirds were found at the time of the investigation to have been sick more than half a year, and the physician estimated that 295 cases were chronic, while 81 were likely to become progressively worse.

That the prevention of sickness is the most effective blow against poverty and dependency was the recommendation made by the committee making the investigation. Some of the needs to this end were pointed out as more prompt medical attention, education in hygiene and sanitation, opportunity for periodical medical examinations to prevent sickness, and better health conditions both in homes and places of employment. A state commission to make a thorough study of the facts as a basis for a well-organized program of action was also recommended.—*Press Service, North Carolina State Board of Health.*

CARE OF THE BABY

BEFORE THE BABY COMES

(Prepared by the Children's Bureau, U. S. Department of Labor)

In this series of articles we have been dealing with the early life of a baby, after birth; we have not considered the equally important care of the baby in the months of his life before birth. The necessity for this care is apparent from the fact that statistics show that many thousands of babies die every year in the early days of life either because they were born prematurely, or because they were born too weak to survive. A very large number of them lose their lives because the mothers did not have proper care before they were born, or at the time of childbirth. Every woman expecting a baby should have such care as will result in the birth of a healthy and happy baby.

A prospective mother needs a light, nutritious diet of digestible foods, such as she likes and her appetite demands. Fried and greasy foods, heavy puddings, and all heavy or underdone pastries, or an excess of any one article should be eliminated from her diet, as well as anything which she does not readily digest.

She should have a full movement of the bowels every day, and for this purpose should eat plenty of laxative foods, rather than resort to medicines. She should have at least eight hours of sleep at night and another hour during the day with all the bedroom windows open, if she has no out-of-door sleeping room. She should have systematic exercise in the open air every day, spending the time pleasantly in walking or in taking some form of light exercise, except at the normal time of the menstrual period, when it is better to rest. She should be careful not to continue her exercise beyond the point when she becomes tired.

She should have a daily tub or sponge bath, having the water neither hot nor very cold, and should rub the skin vigorously afterward.

During the last eight weeks of pregnancy she needs special care. The nipples should have attention each day, according to directions given in a publication of the Children's Bureau called "Prenatal Care," which is sent free upon request to the Chief of the Children's Bureau, U. S. Department of Labor, Washington, D. C.

Throughout this stage of pregnancy the mother should as far as possible be spared all forms of heavy and taxing labor, in order that her strength may be built up in anticipation of the coming demand upon it. The baby's proper development also depends largely upon the mother's condition at this time, since the baby gains half his weight in the last eight weeks of pregnancy. Therefore, if he is to be born strong and healthy, it is most important that the mother have plenty of good food, and be spared undue work and worry through this crucial period. To help the mother, to afford her opportunity for rest and to relieve her mind of any burden, may entail both expense and trouble upon the family, but it will be repaid a thousandfold in the health of the mother and baby which will result from the effort, not only for the time being, but forever afterward.

The mother of the expected baby should be under the care of a good doctor as long before the birth as possible, in order that he may watch for and correct any untoward symptoms that may arise.

In a city where the mother has not only plenty of private physicians, but hospitals, dispensaries and clinics at her service, it should be possible for her to have the necessary medical attention to keep her well.

In rural districts where medical attention is more difficult to secure, owing to the long distance the doctor often has to travel, the mother should endeavor to see him now and then, and should send a sample of the urine to be examined, as often as may be practicable, particularly during the last three months.

The pamphlet on Prenatal Care, already mentioned, gives advice regarding the hygiene of pregnancy, which mothers will find useful.

It is exceedingly important that the ailments of pregnancy be dealt with in the beginning before they develop into more serious matters. At the first appearance of swollen hands and feet, of persistent headache, of pain in any part, of hemorrhage, or of spots before the eyes, a good doctor should be called.

OF INTEREST TO PHYSICIANS

The following monthly report of Dr. Henry Hanson, Senior Bacteriologist of the State Board of Health, to the State Health Officer, will be of interest to the physicians of the State:

The laboratory reports for the month of March do not show a great prevalence of communicable diseases in the State.

The number of specimens sent in for intestinal parasites is very low and should be much higher. The total of such specimens for all of the laboratories amounts to three hundred and seventeen which is so small a number that none of the laboratories except the one at Key West, should fall below this.

This seems to me is a matter which should be urged by the field men in order to secure more diagnoses of this kind. It is undoubtedly a fact that many who complain of various obscure ailments are hook-worm sufferers. The point in question is that of a man sent in to the laboratory with a diagnosis of amoebic dysentery and we were asked to pass a rectal tube in order to find the amoeba by direct examination

while these parasites were still warm and actively motile. A specimen was secured in this manner which on examination failed to show amoeba but several hookworm eggs in very small quantities of the stool. This is one case where there probably was a severe hookworm infection and where it seems that the parasite had something to do with the man's diarrhoea.

We often get letters from people who desire information about their condition, in which they describe symptoms which appear to be those of chronic hookworm disease.

Diphtheria has been sporadic but the number of cases has not been high.

Malaria has again shown a very low incidence. In fact, the central laboratory has not had a positive smear during the month of March. On the contrary, the incidence of typhoid has been high; thirty-three positive widals and eleven incomplete reactions in a total of one hundred and ninety-two specimens examined in the central laboratory.

The part of the work which has been of the greatest interest and which has involved much technical difficulty is that of the Wasserman reaction. One hundred and fifty-seven Wassermans have been performed in the central laboratory.

The difficulties in Wasserman reactions are due to the fact that there is a lack of uniformity in the technic throughout the entire country. When one consults the literature it is found that the authorities are decidedly at variance in regard to several points in the technic.

The titration of reagents is based on an indicator which consists of a certain quantity of red cells which should be made up to a certain dilution. In this respect we find that some authorities use a $2\frac{1}{2}$ per cent suspension; others a 5 per cent suspension and yet others a 10 per cent suspension. The unit is based in some cases on a quantity of amboceptor and complement, each of which must be standardized, which gives complete hemolysis in 0.1 cc of 10 per cent red blood cell suspension; in other cases on $\frac{1}{2}$ cc of a five per cent suspension; in other cases 1 cc of $2\frac{1}{2}$ per cent suspension and again there are still other variations. Some workers use 0.1 cc of a suspected serum in the test while others use 0.05 of a cc and others 0.8 of a cc.

I have mentioned these things to illustrate some of the difficulties encountered in the effort to get uniform results. The difficult points in other phases of the test are the sera which contain natural anti-sheep amboceptor. In such cases one is apt to get a false negative reaction. In other cases one finds that the patient's serum shows certain inhibitory qualities. Non-specific inhibition develops in many sera after they have been standing for several days. This non-specific inhibition which develops in a few days is thermolabile and as a rule can be eliminated if the sera are inactivated at 56 degrees centigrade on the morning on which the test is made.

A closer supervision over the technical details in the various laboratories would yield more uniform results. Without more conference and personal supervision of the routine work in the laboratories there will be a discrepancy in reports and some of the laboratory workers are going to be unjustly criticized as a result.

This difficulty can not be so readily checked up and studied in a laboratory where a small number of Wassermans are made monthly because there is not sufficient material on hand for repeating tests and getting comparative results.

I have also found it important that more than one guinea pig's serum should be used in each series of tests. This would add to the cost of the test unless one could have a sufficiently large number of animals on hand so that one could bleed a number of pigs from the heart and allow them to rest several weeks before they are bled again. During the past weeks we have been obliged to kill a guinea pig each week in order to have enough serum for the work which we have been doing. When one kills one or two pigs each week for this purpose in addition to the pigs which are used in virulence test and other bacteriological experiments, a large number of animals will be used up.

We have not lost any guinea pigs from disease this month. Our improved caging in the animal house will guard against the difficulties which we had last year. The animals are kept in cages with a quarter of an inch mesh wire bottom which insures them against dampness, one of the most serious contributory factors of bronchial affection which these animals are subject to.

Since the Wasserman test was included as a part of the routine examinations of the laboratory we have had several requests for mailing outfits for this purpose. We do not have such mailing outfits and it seems that this additional diagnostic aid is of such very great value and importance to both the physician and the patient, that they should be willing to secure the necessary tubes for collecting and sending such specimens.

The vacuum tube which was devised by Dr. Keidel is especially adaptable for collecting blood for blood cultures or Wasserman tests. These tubes can be secured and carried in stock by any of the druggists in the various towns in the State and the physicians will in that way be able to secure the outfits when necessary. We have advised a number of the physicians in regard to this matter and have given them the description and the catalog number as given in the catalog of the Arthur H. Thomas Company, of Philadelphia.

In securing blood for this purpose it is very important that it should be collected and sent under good technic. Many of the specimens of blood which are sent in in vials are hemolysed as a result either of improper sterilization or on account of not having properly rinsed the vials with a sterile normal salt solution so as to render the receptacle isotonic.

At a little later date I will present for your approval a pamphlet or circular giving the important points to be observed in collecting the specimens for the Wasserman reaction and also for blood cultures.

Health Briefs

Light promotes cleanliness.

Obesity menaces longevity.

Bad teeth handicap children.

Insufficient sleep endangers health.

Untreated pellagra ends in insanity.

Today is always the best day to clean up.

A clean mouth is essential to good health.

Polluted drinking water causes many deaths.

Efficient muzzling of dogs will eradicate rabies.

Bullets may kill thousands—flies tens of thousands.

Fresh air, food, rest—these three combat tuberculosis.

Isolation is the most efficient means of controlling leprosy.

An efficient health officer is a good community investment.

Bad temper is sometimes merely a symptom of bad health.

Physical training in childhood is the foundation of adult health.

Insanity costs every inhabitant in the United States \$1.00 per year.

Headache is Nature's warning that the human machine is running badly.

The protection of the health of children is the first duty of the Nation.

The U. S. Public Health Service has proven that typhus is spread by lice.

In the lexicon of health there is no such word as "neutrality" against disease.

The death rate of persons under 45 is decreasing; of those over 45 it is increasing.

Overeating, constipation, lack of exercise, foul air, eye strain, may produce headache.

The U. S. Public Health Service has reduced typhoid fever 80 per cent in some communities.

Correspondence

NO "LATEST" TREATMENT FOR PELLAGRA

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: Please send me your latest treatment on pellagra. What I desire is the medicinal treatment. Have some three or four cases on hand and have been putting them on a vegetable diet and giving restorative tonics, also Fowlers Solution, in increasing dose.

Hoping to hear from you by return mail and thanking you in advance for same, I remain,

Yours very fraternally,

Jacksonville, Fla., May 13, 1916.

Dear Doctor: In reply to your letter of the 8th, I will say that I do not believe there is any medicinal treatment that will have any appreciable effect upon pellagra, and I believe that this opinion is borne out by the experience of practically every worker who has devoted his time to the careful study of this malady.

It is regrettable that there is still so much uncertainty as to the causation of pellagra, but I believe that the experiments which have been conducted by Dr. Goldberger of the Public Health Service has brought forth more convincing evidence than any of the other experiments which have been conducted along the line of other theories, and in the absence of more exact knowledge, I believe that for the present our treatment had best be mapped out along the lines advised by Dr. Goldberger.

I would not advise a strictly vegetable diet, as these experiments seem to show it is a deficiency of proteids which is responsible for the occurrence of the disease, hence a varied, well balanced diet containing a generous proportion of proteids seems to be indicated.

Fowlers Solution and other tonics may be of value as adjuncts but the important point is the diet.

Very truly yours,
(Signed) Joseph Y. Porter, State Health Officer.

PROBABLE SOURCE OF TYPHOID INFECTION

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: We are very much exercised because of two cases of typhoid fever in town.

Sanitary conditions seem to be all right and the analysis of three samples of water sent you recently, show that the water being used, contain no dangerous germs.

We are at a loss to know from what source this fever originates, and as it is just at the beginning of summer, we are afraid the disease will spread unless we know how to combat it. Dr. suggested that maybe the State Board of Health might send an expert here to look carefully into the matter. We will be very glad therefore, of you can arrange to send a man here for that purpose.

Kindly let us hear from you as early as possible.

Yours truly,

Jacksonville, Fla., April 24th, 1916.

Gentlemen: I have your letter of the 22nd, with regard to the occurrence of two cases of typhoid fever in your town. It is very improbable that the source of infection in this instance is in the water supply. The great majority of cases of typhoid in this state are transmitted by flies and this seems to be the most likely solution of the present cases. Probably, some person harboring the typhoid bacillus in the intestines has visited your town, and the disease has thus been spread by flies from the infected excreta from this person.

It is exceedingly difficult in most instances to trace the exact source of an outbreak of typhoid fever and in the event there is no further spread of the disease, from the two existing cases, I think it is hardly necessary to detail a representative from this Board to investigate the matter. However, should any further developments arise, I shall be very glad to render you whatever assistance is possible.

Very truly yours,
(Signed) Joseph Y. Porter, State Health Officer.

DISPOSAL OF SEWAGE IN RURAL HOME

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

I wish to install a septic tank or something of the kind for disposing of the sewage from my home—bath room, toilet, kitchen sink, etc. If you have any literature on the construction of such tanks, the cost, etc., you will confer a favor on me by sending same to me.

Thanking you in advance for any information or advice you may give in this matter, I am,

Yours very truly,

Jacksonville, Fla., April 26th, 1916.

Dear Sir: In reply to your letter of the 24th, I am mailing you today, under separate cover, copy of publication 99, in which you will find description of a number of different systems of sewage disposal.

The septic tank described in this publication is a very satisfactory disposal plant, but if you contemplate the installation of a plant of this nature, I would suggest that you delay beginning this work until we can furnish you plans and specifications for a small Imhoff tank, which is no more expensive than a septic tank, and is at the same time much more satisfactory.

This literature should be ready for distribution within the next two or three weeks and I shall be very glad, at that time, to mail you a copy of the pamphlet.

Very truly yours,
(Signed) Joseph Y. Porter, State Health Officer.

ANONYMOUS COMPLAINTS

..... Fla., 1916.

J. Y. Porter, Jacksonville, Fla.

Dear Sir: The citizens of this town request the State Board of Health to make a personal examination of the dairy owned by

Yours and oblige,

A Citizen of..... Fla.

The above letter, requesting an inspection of a dairy, was recently received by the State Health Officer, who takes this occasion to state that no cognizance can be taken of anonymous communications of this nature. Such complaints or requests will receive prompt and courteous attention when submitted in proper form, bearing the name and address of the complainant, but to comply with all unsigned requests received by the executive office would result in a large expenditure each year in the investigation of complaints, many of which would be entirely unnecessary and unfounded, and often based solely upon grounds of personal prejudice and spite.

Press Comment

HEALTH EXHIBIT TRAIN AT TAMPA

Hundreds viewed the exhibits aboard the State Board of Health Special Train yesterday, which arrived at noon after several hours' delay. While the exhibit train lay in the siding through the day, people thronged the cars and plied the attendants with questions regarding the trip. On account of the delay to the train the exhibition of the films at the Strand Theater, under the auspices of the Hillsborough Medical Society, was not held, and many were disappointed. However, these will be shown between the hours of 10 and 12 Monday, and there will be no charge for admission. School kiddies will be turned out from their studies to see what advances have been made in the march of health and happiness.

In the heart of the city, on the tracks where the old Atlantic Coast Line depot stands, the exhibit train is parked. It consists of three coaches, all shimmering in a new coat of varnish, and instead of the name of any railroad strung across the sides of the coaches, the words "State Board of Health Exhibits," are lettered in yellow gold, standing out in bold relief. There is no admission fee to the train, and everyone is urged to inspect it. It is for the purpose of educating the public along the lines of the need of health.

GREAT CAMPAIGN TO BEGIN

A campaign for fighting diseases and causes of sickness will open up and take the city by storm Monday, when the active work will be begun by the workers under the excellent leadership of Dr. J. Y. Porter. As a preliminary opening to the big campaign, there will be a meeting held this evening in the Tampa Bay Casino at 7:30 o'clock in the interest of public health, under the auspices of the Hillsborough County Anti-Tuberculosis Society and Allied Organizations.

Illustrated moving pictures will be shown, while Dr. Porter, who is a well-known speaker, delivers a lecture appropriate to the pictures. There is no admission, and the public generally is invited. Mayor McKay, who is taking an active part in the program, will introduce the speaker. The public school orchestra will furnish music for the occasion, while the Hyde Park Methodist Church choir of five voices will sing.

One of the features of the meeting will be singing and music, which promises entertainment for all. Members of the Tampa Graduate Nurses' Association will act as ushers. There will be no services at any of the churches of the city in the evening in order that the public may attend.

WILL FIGHT TUBERCULOSIS

Enough money has been derived from the sale of Red Cross Seals in Tampa to start an active war on tuberculosis, and a special nurse will be employed and a base opened. She will have as one of her duties the visiting of all cases of tuberculosis and the reporting of all cases. She will instruct those living under bad conditions the need of changing their ways.

Tonight when the meeting opens with music by the public school band, it is hoped the Casino will be crowded. Dr. Porter's lectures on the various pictures will be: "The Temple of Moloch," "Long vs. Short Haul," "Tommy's Birth Certificate," "Toothache," and "Price of Human Life."

When interviewed yesterday, Dr. Porter said that fully 95 per cent. of the rural population of the towns along his itinerary had turned out to see the train and that all had approved of it. Millions of lives will be prolonged and probably saved through the accomplishment of the great good on the trip.—Tampa Tribune.

VACCINATION

Courage and persistence cannot be denied to the anti-vaccinationists, since the battle they fight is plainly a losing one. While they may score a slight success here or there on the specific question of vaccinating against smallpox, the general cause of inoculation makes great conquests in other fields. The anti-typhoid vaccine is a case in point. The war in Europe has supplied a test on an enormous scale, and there has been no divergence of opinion as to the usefulness of inoculation for the armies in the field. That the special conditions created by war do not offer the only useful field for action is indicated by a report of the United States Public Health Service regarding the spread of anti-typhoid inoculation among the civilian population in this country. In 1914 about 100,000 persons were immunized. This year the number will probably be 300,000. In certain parts of the South systematic campaigns for immunization are under way. The results among the general population are not so easily recorded as in the army experiments. There the showing is extraordinary. The Health Service states that since the discovery of the anti-typhoid vaccine the number of cases in the army has been reduced from a ratio of 536 per 100,000 to 3 per 100,000, which means, of course, the virtual extirpation of the disease.

The standing argument against compulsory vaccination for smallpox is that, whatever may have been the usefulness of the practice in days gone by, modern sanitation and general improved conditions of living have rendered it obsolete. Smallpox is a filth disease, and when you abolish dirt you wipe out smallpox. The same argument logically applies to typhoid. Destroy the conditions which create typhoid, and there is no need for vaccines. But that is just the point. It has taken the world some hundreds of years to attain a standard of cleanliness in which smallpox is negligible among civilized peoples. How long will it take to wipe out the conditions which lead to typhoid? Safeguarding the water supply is a tremendous task in this country, with its enormous stretch of non-urban territory, and given the outdoor habits of the people. It is a fact that city folks bring typhoid with them from their vacations in the woods and mountains. The problem is altogether a different one from that existing in a highly urbanized and compact country, like Germany, where by strict attention to the milk and water supply, typhoid has been reduced to a minimum. If, then, only as a temporary measure, inoculation is fully justified.—The New York Evening Post.

BOARD OF HEALTH TO BUY FLIES

Dead flies by the quart or pint are wanted by the City Board of Health, and that body is willing to pay for the flies, provided enough of them are killed. A plan as outlined by Councilman L. T. Highleyman at yesterday's meeting of the board resulted in the passing of a motion, offering a prize of \$10 to the boy or girl under 18 years of age who would bring the most dead flies to the city health officer's office between now and July 1. A second prize of \$7.50 will be given and a third prize of \$5.00.

The whole scheme is to rid the city of flies. It is believed that by encouraging the boys and girls to swat 'em whenever they get a chance Miami can get rid of a lot of the pests. In order to measure the flies without handling them, City Health Officer Edgar Peters has requested that persons bringing in flies, place them in pint or quart bottles and seal the top. By doing this, track can be kept of the number of flies brought in by different contestants. Dr. Peters will keep a book in which he will enter every bottle of dead flies brought in, and on July 1st the Board of Health will award the cash prizes to the best swatters.

"I guess I'll have quite a collection of flies around my office before this contest closes," said Dr. Peters. "It's a good thing and ought to result in the killing of a lot of flies during the next few weeks."—Miami Metropolis.

Veterinary Notes

FOOT AND MOUTH DISEASE REAPPEARS

On March 31, 1916, the Secretary of Agriculture declared the United States free from Foot and Mouth Disease and issued an Order revoking the quarantine to prevent the spread of the disease.

It now appears the disease has again been discovered in May township, Christian County, Ill., and that county has been again quarantined.

Christian county was the last point at which the disease existed in the United States. The citizens of the county co-operated most energetically with the officials and the disease was promptly checked before, and there can be little doubt that this co-operation will again be given and the spread of the disease will be not only checked but entirely eradicated in the minimum time.

It should be noted that the United States is the only country that seems to be able to successfully cope with Foot and Mouth Disease.

ESCAMBIA COUNTY WILL ERADICATE TICKS

The citizens of Escambia County are lining up for a campaign against the cattle tick. Work of vat construction is now in progress under the guidance of Federal, State and County officials, and a definite date will soon be set for the inauguration of systematic dipping of every bovine animal, once every two weeks.

It may be expected that other counties will soon follow the example set by Broward and Dade Counties, which after a few months campaign of dipping, were declared free of the cattle tick, on March 10th, by the Secretary of Agriculture.

THE STATE DIPPING AND SHIPPING FACILITIES AT JACKSONVILLE

There have recently been completed, in Jacksonville, at the Jacksonville Union Stock Yards, special facilities for the dipping and feeding of cattle, en route to other States, and to the two tick-free counties, Broward and Dade, in Florida.

These facilities consist of a large dipping vat which has in connection with it non-infectious pens in which dipped cattle can be placed pending shipment to Broward or Dade counties. Shipments of dipped cattle can also be forwarded from here to a more northern, federal vat, such as at Atlanta, from which the animals can be forwarded to any point. The importance of this facility will be recognized when it is known that no cattle originating in a ticky area can be shipped to Broward or Dade Counties except they pass through this vat and pens because they are the only ones in the State which are constructed to prevent the ingress of ticks from adjoining pens, or pastures, and, in this, they comply with Federal and State Regulations governing the movement of cattle from a tick-infested to a tick-free area, within the State.

These facilities were supplied by the State Board of Health of Florida, and are under its supervision.

Another similar facility of almost equal importance has been supplied by the Stock Yard Company. This is a non-infectious pen into which tick-free cattle coming from a tick-free area can be unloaded for feed, water and rest, to comply with the Federal law which requires all animals, in transit, to be unloaded for feed, water and rest, every twenty-eight hours and at the same time they are so constructed as to prevent the ingress of ticks.

This places Jacksonville on the map as a feeding center for shipments of tick-free cattle originating in the North and West, or tick-free South, destined to tick-free areas in Florida. This pen is separate and apart from the dipping vat, because no cattle that it is necessary to dip can ever be allowed in it. It is intended, as stated above, only for cattle coming from a tick-free country to a tick-free area, in Florida, and for the further purpose of shipping cattle from a tick-free area in Florida, such as Broward and Dade Counties, to some point in another tick-free area, in Florida, or some other State, without the necessity of dipping. Similar pens exist in Birmingham, Atlanta, Augusta and Columbia.

When the work of tick eradication becomes general, in Florida, a Federal officer will be stationed here to take general charge of the work, in co-operation with State and County authorities, and that official will then supervise these facilities. It will then be possible to make through shipments of dipped cattle direct from Jacksonville to any point in the United States.

ANOTHER OUTBREAK OF ANTHRAX

Another outbreak of anthrax is now existing; this time, in the vicinity of Jay, Santa Rosa County. Some twenty-odd head of cattle died before the nature of the disease was determined, and carcasses had been skinned and were allowed to be eaten by buzzards and dogs, thus spreading the infection.

Correspondents state the same disease existed near Jay, about a year ago.

A veterinarian of the Board has already given the first dose of anthrax vaccine to about two hundred head of cattle which are in danger of contracting the disease, and will apply the second dose, in due time.

A DURABLE WHITEWASH

The following directions are for preparing a whitewash suitable for all interior or exterior work and is especially recommended for stables, poultry houses and all outhouses, as it withstands all weather conditions for a sufficient length of time to warrant its use.

To a gallon of water add two pounds of plaster of Paris and one pound of glue, allowing same to stand over night. Next morning slack a half bushel of best, fresh lime, in hot water. When thoroughly slacked, add a peck of common salt that has been previously dissolved in hot water. Now heat the glue and plaster of Paris mixture to dissolve the glue and add to the lime and salt mixture. Stir thoroughly and add four gallons of water, stirring again.

Let stand a few days to "season." This is a stock mixture and may be diluted with water, and applied with a spray or brush, after being strained through a fine sieve or cloth.

Summary of Public Health Administration, April

SOUTHWESTERN DISTRICT

Tampa: Routine work, office of the Assistant to the State Health Officer; correspondence: 310 letters dictated during April.

Inspections by Sanitary Patrolman as follows: Screening Law—boarding houses 10, dining rooms 8, dining cars 14, kitchens 11, grocery stores 35, fruit stands 3, fruit peddlers 16. Surface Closet and Water Carriage Laws—private residences 50. Sanitary Nuisance Laws—cigar factories 12. Other Sanitary Laws—miscellaneous 31. Violations of sanitary laws ordered abated. Communicable Diseases—smallpox 8, typhoid fever 1, scarlet fever 7, diphtheria 8; fumigations, releases, etc., 18.

Ozona: Sanitary inspection; interview with local physicians; inspection of school and matter taken up with trustees.

Sarasota: Sanitary inspection; interview with city clerk; conversation in regard to enforcement of state sanitary laws; conference with city physician in regard to health conditions; pellagra blanks and post cards left with physicians for reporting infectious diseases.

Manatee: Sanitary inspection; interview with mayor and city clerk; conference regarding sewerage system and screening law; inspection of all stores and eating places.

Bradentown: Conference with mayor and city clerk in reference to sewerage system; conference regarding health conditions and sewerage system connections; investigation small epidemic scarlet fever; inspection of all stores; matter taken up with merchants personally and by mail.

Palmetto: Sanitary inspection; conference with city authorities; interview in reference to enforcement of screen and surface closet laws; inspection of all stores; temporary school at city hall inspected; advice discontinuance public drinking cups.

Ellenton: Sanitary inspection of town; investigation outbreak typhoid fever; inspection of grammar school; talk given to school children in regard to fly protection and hookworm; stores inspected.

Parish: Inspection of Parish school; matter taken up with school trustees; inspection of stores.

Rye: Inspection of school; steps taken to have law enforced with reference to school privy; matter taken up with trustees of school.

Oak Knoll: Sanitary inspection of town; investigation of pellagra cases reported by district public health nurse, and data of cases collected.

Haines City: Sanitary inspection of town; matter of sanitary surface closets taken up with board of city commissioners; inspection of all stores and eating places, and fruit packing house.

Fort Myers: Sanitary inspection of city; conference with mayor in regard to sewerage connections; inspection of stores, restaurants and eating places in regard to screen law, and matter also taken up by mail; inspections of schools; matter of sanitary surface closets taken up with chairman of school trustees; talk given to high school boys upon request of principal of school.

Punta Gorda: Sanitary inspection of town; inspection of insanitary stable; abatement ordered; inspection of rural school; several talks given to school children of different grades in regard to fly contamination. Interview with town clerk regarding sewerage system; interview with councilmen in reference to enacting ordinance for enforcing screening law.

Tampa and Hillsborough County: Lecture prepared to be given before school children, as requested by Superintendent of Public Instruction; three talks given before school boys of Hillsborough High School, George Washington Junior High, and Woodrow Wilson Junior High Schools. Called on for differential diagnosis in suspected scarlet fever cases.

Arcadia: Sanitary inspection of city; conference with city health officer; interview with city clerk in regard to new state sanitary laws; inspection of stores and eating places; notices and copies of law sent to twenty-two stores.

Zolfo: Sanitary inspection of town; conference with city clerk regarding screening law and surface closets; inspection of school and letter written to trustees in regard to law requirements; all stores inspected and copy of law sent to owners of same.

Wauchula: Sanitary inspection of town; interview with town clerk; matter of appointing city health officer taken up with Mayor; copies of screening law and surface closet law sent to mayor and city clerk; all stores and eating places inspected; copies of state screening law sent to fifteen stores.

Bowling Green: Sanitary inspection of town; address before meeting of councilmen; interview with physician regarding health of town; inspection of school; copy of state sanitary laws sent to trustees of school; inspection of stores; notice served to eight asking their compliance with law.

Plant City: Sanitary reinspection of city; all stores found to be complying with screen law with exception of one, and matter taken up with owner of store again; conference with physicians in regard to health conditions.

Dover: Sanitary inspection of school; matter taken up with chairman of school board, who was also interviewed concerning schools at Sydney and Pemberton, and requested to remedy sanitary defects.

Mulberry: Sanitary inspection of town; conference with mayor concerning screening and surface closet laws; all stores in town inspected; notices served to those not complying with screen law; interview with physician regarding health conditions.

Lakeland: Inspection of stores for screening law; matter taken up with few who were violating law; interview with town clerk in reference to sewerage connections.

Bradentown: Sanitary reinspection of town; interview with city health officer; chickenpox cases found.

Manatee: Inspection of smallpox cases at request of attending physician.

WESTERN DISTRICT

Pensacola: Routine work, office of the Assistant to the State Health Officer; management of communicable diseases and supervision of inspections by sanitary patrolman as follows (violations of sanitary laws ordered abated): Screening Laws—boarding houses 1, lunch counters 3, dining rooms 3, kitchens 3, meat shops 2, butcher shops 1, grocery stores 4, fruit stands 5. Surface Closet and Water Carriage Laws—private residences 10. Sanitary Nuisance Laws—horse stable 1. Other Sanitary Laws—ice cream peddlers 2. Communicable Diseases—typhoid fever 3, tuberculosis 6; fumigations, releases, etc., 3.

SOUTH TROPIC DISTRICT

Key West: Routine work, office of the Assistant to the State Health Officer; supervision of toilet inspection for screening law by sanitary patrolman; all violations reported to county solicitor for prosecution; routine laboratory work.

Big Pine: Sanitary inspection of town; recommendations made regarding sanitation of toilets; inspection of school building.

Noname Key: Sanitary inspection of settlement; diagnosis of case of scarlet fever; recommendations as to installation of toilets.

Boot Key: Sanitary inspection of settlement.

Marathon: Sanitary inspection of town; recommendations made regarding sanitation of privies.

Long Key: Sanitary inspection of fishing camp.

Islamorada: Sanitary inspection; recommendations regarding sanitary privies; inspection of school building.

Pinderville: Sanitary inspection; recommendations regarding sanitary privies.

Plantation Key: Recommendations made for sanitary toilets.

Tavanier: Recommendations made for sanitary privies; inspection of school building.

Planter: Inspection of school building; suggestions made relative to toilets.

Flamingo: Sanitary inspection of settlement; inspection of school building; recommendations made regarding sanitation of toilets.

Shark River: Sanitary inspection of factory.

Miami: Conference with city health officer.

Fort Lauderdale: Conference with city health officer relative to mortality from infantile diarrhoea; recommendations made.

West Palm Beach: Sanitary inspection of city.

SOUTH CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer.

Marion County: Investigation smallpox outbreak 19 miles from Ocala; vaccination of 40 colored and 5 whites; isolation of cases.

Dade City: Investigation of municipal septic tank.

Kissimmee: Sanitary inspection of town; conference with city officials in regard to enforcement of screening laws.

Orlando: Sanitary inspection of town; conference with city officials in regard to enforcement of screening laws.

Tavares: Sanitary inspection of town; conference with city officials in regard to enforcement of screening laws.

Eustis: Sanitary inspection of town; conference with city officials in regard to enforcement of screening laws.

Leesburg: Sanitary inspection of town; conference with city officials in regard to enforcement of screening laws.

Martin: Investigation of a menace to health in shape of a breeding place for mosquitoes; arrangement made for abatement.

CENTRAL DISTRICT

Gainesville: Routine work, office of the Assistant to the State Health Officer. Conferences with city officials regarding health matters.

Panama City, St. Andrews and Bay and Calhoun Counties (West Central District): Investigation of pellagra.

Alachua, High Springs, Newberry, Trenton, Archer, Micanopy, Hawthorne, Waldo, Gainesville: Lectures to high schools.

Alachua, High Springs, Newberry, Micanopy, Hawthorne, Waldo, Williston, Morriston, Montbrook, Archer, Bronson, Trenton: Monthly tour of inspection.

Starke, Raiford, Lake Butler: Sanitary inspection with District Public Health Nurse; lecture to school pupils at Starke.

EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer; inspection of grocery stores, fruit stands, meat shops, restaurants, bakeries, etc., and notices served to all to comply with screening law; assistance in compilation of sanitary code to be presented to city commission; attendance meeting of woman's club; attendance meeting of St. John County Medical Association in connection with draft of sanitary code for city; attendance meeting of city commission and presentation of sanitary code; notification of 39 violators to comply with screening law.

Daytona: Special mission; inspection of grocery stores, fruit stands, meat shops, restaurants, etc., and notices served to comply with screening law.

New Smyrna: Mosquito survey of New Smyrna and vicinity.

Rogers Lake: Investigation case of smallpox.

WESTERN DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during April: Candler, Wiersdale, Lady Lake, Leesburg, Okahumpka, Center Hill, Webster, St. Catherine, Croom, Brooksville, Trilby, Tarpon Springs, Sutherland, Dunedin, Clearwater, Largo, St. Petersburg, Like Oak, Madison, Green Cove Springs, Interlachen, Edgar, Pomona, Seville.

Total number towns visited in 1916 to May 1..... 88

PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes" Vol. XI, No. 4, April, 1916, pp. 28. Press service bulletins to Florida newspapers: April 5, "Work and Play;" April 12, "Malaria;" April 19, "Wasted Energy;" April 26, "A Foolish Question."

Publications out in April: No. 156, Warning Notice, Exhibit Cars; No. 157, How to Test Cattle for Tuberculosis; No. 158, Malaria; No. 159, Some Poultry Pests.

Distribution of literature during April:

Number pieces distributed on request.....	829
Number pieces distributed on Exhibit Train.....	2,400
Health Notes, April, mailing list.....	10,100
Press service bulletins to newspapers, 4 issues.....	1,100

Total	14,429
Total number pieces literature distributed in 1916 to May 1.....	65,433

SMALLPOX

Reported cases of smallpox in Florida, April:

Greenville, Madison County.....	3
Jacksonville, Duval County.....	1
Manatee, Manatee County.....	2
Rogers, Volusia County.....	1
Tampa, Hillsborough County.....	11
Total	18
Total number cases reported in 1916 to May 1.....	75

STATUS OF TUBERCULOSIS DISTRICT NURSING FOR MONTH ENDED APRIL 30, 1916

<i>Residence of Cases Visited by Districts</i>	<i>Total Number of Patients Under Instruction, Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Patients Under Instruction to Date</i>	<i>Total Number of Patients Following Instructions</i>
Western	120	24	3	3	..	138	54
Southwestern	184	15	8	3	..	188	136
North Central	260	7	4	2	..	261	138
West Central	167	35	5	8	5	185	94
East Coast	312	60	23	21	5	323	323
Total	1,043	141	43	37	10	1,095	745

BIOLOGICAL PRODUCTS

Distribution of Biological Products during April (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only). Number of persons receiving treatment:

<i>County and Town</i>	<i>Anti-Smallpox Vaccine</i>	<i>Anti-Rabic Vaccine</i>	<i>Anti-Typhoid Vaccine</i>	<i>Diphtheria Antitoxin Curative and Immunizing</i>	<i>Tetanus Antitoxin Immunizing</i>
CLAY					
Green Cove Springs.....	30	..	..	..	..
DADE					
Miami	100	..	..	..	..
DUVAL					
Jacksonville	87	..	..	..	..
ESCAMBIA					
Pensacola .....	..	..	7	..	..
HILLSBOROUGH					
Tampa	70	1	..	4	..
JACKSON					
Bascom	10	..	..	..	..
JEFFERSON					
Monticello .....	..	2	..	..	..
MANATEE					
Manatee	30	..	..	..	..
MONROE					
Key West .....	..	..	..	1	..
PASCO					
San Antonio .....	..	3	..	..	..
POLK					
Bartow .....	..	..	..	1	..
Fort Meade .....	..	..	15	..	..
SEMINOLE					
Sanford	20	..	..	..	..
ST. LUCIE					
Sebastian	20	..	..	..	..
Total	367	6	22	6	..

Total number persons receiving anti-smallpox vaccine in 1916 to May 1.....	2,702
Total number persons receiving anti-rabic treatment in 1916 to May 1.....	13
Total number persons receiving anti-typhoid vaccine in 1916 to May 1.....	47
Total number persons receiving diphtheria antitoxin in 1916 to May 1.....	47
Total number persons receiving tetanus antitoxin in 1916 to May 1.....	..

CRIPPLED CHILDREN

NAMES								Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment May 1st, 1916
	In St. Lukes 4-1-16	In Brewster (Col.) 4-1-16	Outside Treatment 4-1-16	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment Examined, Not Admitted				
F. P.	1	..	..	..	..	..	..	1	..	Tbc. Spine	1
H. M.	1	..	..	..	..	..	..	1	..	Tbc. Ilium	1
W. W.	..	1	..	..	..	..	..	1	..	Polio. Paralysis	1
B. K.	..	1	..	..	..	..	..	1	..	Club Feet	1
R. W.	1	..	..	..	..	..	..	1	..	Deformity	1
O. P.	1	..	..	..	..	..	..	1	..	Spastic Paralysis	1
D. W.	..	1	..	..	..	..	..	1	..	Tbc. Spine	1
F. B.	..	1	..	..	..	..	..	1	..	Club Feet	1
S. B.	1	..	..	..	..	..	..	1	..	Ankylosis Knee	1
F. M.	..	1	..	..	..	..	..	1	Adhesive dress- ings 14.....	Transferred	..
A. P.	1	..	..	..	..	..	..	1	Impvd. 28th.....	Polio. Paralysis	1
W. S.	1	..	..	..	..	..	..	1	Cured 2d.....	Bow Legs	..
H. R.	1	..	..	..	..	..	..	1	Cast 15th.....	Osteomyelitis	1
F. M.	..	..	1	1-6th	..	..	..	1	..	Club Foot	1
L. S.	..	..	1	1	..	..	..	1	Hip Cast 25th.....	Tbc. Hip	1
	..	..	..	..	..	..	..	1	Cast 8th, Cast 25th. 20th Tendon Transplant	Fracture Femur	1
	..	..	..	..	..	..	..	1	..	Polio. Paralysis	1
Total	8	1	4	2	2	..	..	15	1	..	14

BACTERIOLOGICAL LABORATORIES

SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Total
Animal Parasites.....	149	94	19	..	7	269
Diphtheria	85	87	2	2	8	184
Gonorrhoea	88	47	81	..	14	230
Malaria	158	136	29	..	13	336
Pathological	26	6	3	..	1	36
Rabies	9	..	..	..	..	9
Tuberculosis	155	101	46	1	22	326
Typhoid	163	117	40	1	21	342
Water: Bacterial Examination.....	43	7	..	3	30	83
Wasserman Tests.....	101	85	19	..	6	211
Miscellaneous	58	16	30	..	83	187
	1,036	696	269	7	205	2,213

Total number of specimens examined by the Laboratories of the State Board of Health of Florida, during April, 1916.....2,213
Tallahassee Laboratory closed during April.

DISTRIBUTION OF DISEASES DETERMINED BY BACTERIOLOGICAL
LABORATORIES, APRIL, 1916
(MALARIA)

TOWN.	Diphtheria	Gonorrhoe	Etiocoautummal	Quartan	Terrian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Tapeworm	Ascariis	Oxyuris	Kabies	Wasserman	Trichurias
Avon Park.....
Benson	1	..	1	..	..	..	..	..	..
Bowling Green	1	..	..	..	..	..	..
Bradentown	1	..	..	..	..	..	..
Brooksville	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Bunnell	2	..	..	..	..	..	..	..
Center Hill	1	2	..	..	..	..	..	..
Cocoanut Grove.....
Cottage Hill.....	1	..	..	..	..	..	..	..
Dade City.....	1	..	..	..
Daytona	1	1	..	..	..	..	..	..	..
DeFuniak Springs.....	4	..	..	..	..	..	..
Ellenton	1	..	..	..	..	..	..	..	..
Evinston	3	..	..	..	..	..	..
Fernandina	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Ft. Green	1	..	..	..	..	..	..
Ft. Meade.....	..	1	..	..	..	..	3	..	..	..	..	..	..	..	..
Ft. Myers.....	2	..	..	..	..	..	..	..
Gretna	1	..	..	..	..	..	..
Hallandale	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Hawthorn	2	..	..	..	..	..	..
Jacksonville	1	20	..	..	..	..	2	17	4	1	..	1	1	41	..
Release C.	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jasper	1	..	..	..	..	..	..
Key West.....	1	..	..	..	..	..	..	..	..
Lakeland	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Largo	1	..	..	..	..	..	..
Leesburg	1	3	..	..	..	..	..	..
Mandarin	1	..	..	..	..	..	..
Madison	1	..	..	..	..	..	..	..	..
Manatee	1	1	..	..	..	..	..	..	..
Miami	2	..	..	..	..	1	2	..	..	..	..	..	..	..
Miccosukee	1	..	..	..	..	..	..	..
Milton	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Millville	1	..	..	..	..	..	..	..	..
Monticello	1	..	..	..
Mulberry	2	..	..
Muscogee	1	..	..	..	..	..	..	..	..
New Smyrna.....	2	..	..	..	..	..	..	..
Nocatee	1	..	..	..	..	..	..	..	..
Okeechobee	1	..	..	..	..	..	1	..	..	..	..	..	..	..
Orlando	1	..	..	..	..	..	1	2	..	..	..	..	..	..
Oxford	1	..	..	..	..	..	..	..
Ozona	1	..	..	..	..	..	..	..
Pace	3	..	..	..	..	..	..	..	..
Palatka	1	..	..	..	..	..	1	1	..	..	..	..	..	..
Palmetto	1	1	1	..	..	..	..	..
Panama City.....	1	..	..	..	..	..	..	..
Perry	1	..	..	..	..	..	..	..
Plant City.....	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
Pensacola	14	..	..	..	..	..	6	10	4	..	..	..	..	..	..
River Junction.....	..	14	..	..	..	..	..	2	..	..	..	..	..	..	..
St. Augustine.....	3	2	..	..	..	..	..	..	..
Sanford	2	4	..	..	..	..	2	..	..
Sarasota	1	..	..	..	..	..	..	..	..	..	..
Sebastian	3	1	..	..	..	..	..	..
Summerfield	1	..	..	..	..	..	..	..
Sutherland	2	..	..	..	..	..	..	..
Tallahassee	2	2	..	..	..	..	1	..	..
Tampa	10	13	..	..	2	..	9	10	3	..	5	..	19	8	..
Tarpon Springs.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Titusville	1	..	..	..	..	..	7	1	..	..	..	..	..	..
Tropico	1	..	..	..	..	..	..	..	..
Wauchula	1	..	..	..	..	..	..	..
Webster	1	..	..	..	..	..	..	..
Weirsdale	1	..	..	..	..	..	..	..
Wellborn	1	..	..	..	..	..	..	..
Westville	1	..	..	..	..	..	..	..
Williston	1	1	..	..	..	..	..	..	..
Winter Haven.....	1	..	..	..	..	..	..	..	..
Zolfo	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.....	19	61	..	..	3	..	38	64	67	3	6	1	3	65	8

VETERINARY DIVISION TICK ERADICATION

Cattle dipping vats reported constructed during April, 1916:

Alachua County.....	1
Jackson County.....	9
Osceola County.....	1
Duval County (built by the State Board of Health).....	1
Total number of vats reported constructed to May 1, 1916.....	102

GLANDERS

Diagnosed by Veterinarian during April, 1916:

Jacksonville, Duval County.....	1 mule, \$75.00
Jacksonville, Duval County.....	1 mule, 75.00
Total number of cases in 1916, to May 1.....	5

IMPORTATION OF CERTIFIED LIVE STOCK INTO FLORIDA

Apr. 1, Brooklyn, Ind., to Pensacola.....	13 cattle	
Apr. 1, Dupont, Ga., to Orange Heights.....		3 mules
Apr. 4, Charleston, W. Va., to Ft. Meade.....		2 mules
Apr. 4, Charleston, W. Va., to Ft. Meade.....	1 cow	
Apr. 7, Arno, Ind., to Miami.....	1 cow	
Apr. 8, Chicago, Ill., to Jacksonville.....		1 mule
Apr. 9, Atlanta, Ga., to Live Oak.....	2 horses	17 mules
Apr. 9, Havana, Cuba, to Key West.....	5 horses	
Apr. 9, Atlanta, Ga., to Jacksonville.....	7 horses	16 mules
Apr. 10, San Saba, Tex., to Bagdad.....	162 cattle	
Apr. 11, Shelbyville, Tenn., to Brandon.....	1 hog	
Apr. 13, Americus, Ga., to Chipley.....	1 hog	
Apr. 14, Thomasville, Ga., to Tampa.....	12 cattle	
Apr. 14, Wales, Tenn., to St. Cloud.....	1 hog	
Apr. 14, Chicago, Ill., to Pensacola.....		2 horses 15 mules
Apr. 14, Americus, Ga., to Chipley.....	1 hog	
Apr. 15, Atlanta, Ga., to Daytona.....		2 horses 23 mules
Apr. 17, Chicago, Ill., to Key West.....		23 mules
Apr. 18, Atlanta, Ga., to Marion.....	1 horse	
Apr. 19, Alexander, La., to Jacksonville.....	29 horses	
Apr. 19, Alabama to Pensacola.....	1 cow	
Apr. 22, Havana, Cuba to Key West.....		9 horses
Apr. 22, Columbia, Tenn., to Fruitland Park.....	5 hogs	
Apr. 24, Atlanta, Ga., to Gainesville.....	4 horses	
Apr. 26, Omaha, Neb., to Jacksonville.....	2 cattle	1 horse
Apr. 27, Atlanta, Ga., to Jacksonville.....		13 horses 17 mules
Apr. 27, Shelbyville, Tenn., to Tampa.....	1 hog	
Apr. 29, Atlanta, Ga., to Inverness.....		1 horse 13 mules
Apr. 29, Savannah, Ga., to Brandon.....	2 cattle	
Totals: horses, 76; mules, 130; cattle, 230; hogs, 10.....		446
Total number of shipments.....		29

EXPORTATION OF CERTIFIED LIVE STOCK FROM FLORIDA

Apr. 4, Tampa to Havana, Cuba.....	2 cattle	
Apr. 6, Tampa to Havana, Cuba.....	1 cow	
Apr. 8, Jacksonville to Blackshear, Ga.....	1 hog	
Apr. 15, Jacksonville to Boston, Mass.....		1 horse
Apr. 18, Tallahassee to Beauford, S. C.....	2 hogs	
Apr. 18, Jacksonville to McIntosh, Ga.....	1 horse	1 mule
Apr. 20, Jacksonville to Louisville, N. C.....	1 horse	
Apr. 21, Jacksonville to Charleston, W. Va.....		4 mules
Apr. 24, Cottondale to Louisville, Ala.....	1 hog	
Apr. 25, Cottondale to Dotkan, Ala.....	1 hog	
Apr. 26, Jacksonville to Hopkinsville, Ky.....	4 horses	
Apr. 26, Jacksonville to Urbana, Ill.....		2 mules
Totals: horses, 7; cattle, 3; hogs, 5; mules, 7.....		22
Total number of shipments.....		12

HOG CHOLERA AGENTS APPOINTED DURING APRIL, 1916

W. C. Box, Graceville, Jackson County.
C. P. Deal, Graceville, Jackson County.

HOG CHOLERA SERUM DISTRIBUTED, APRIL, 1916

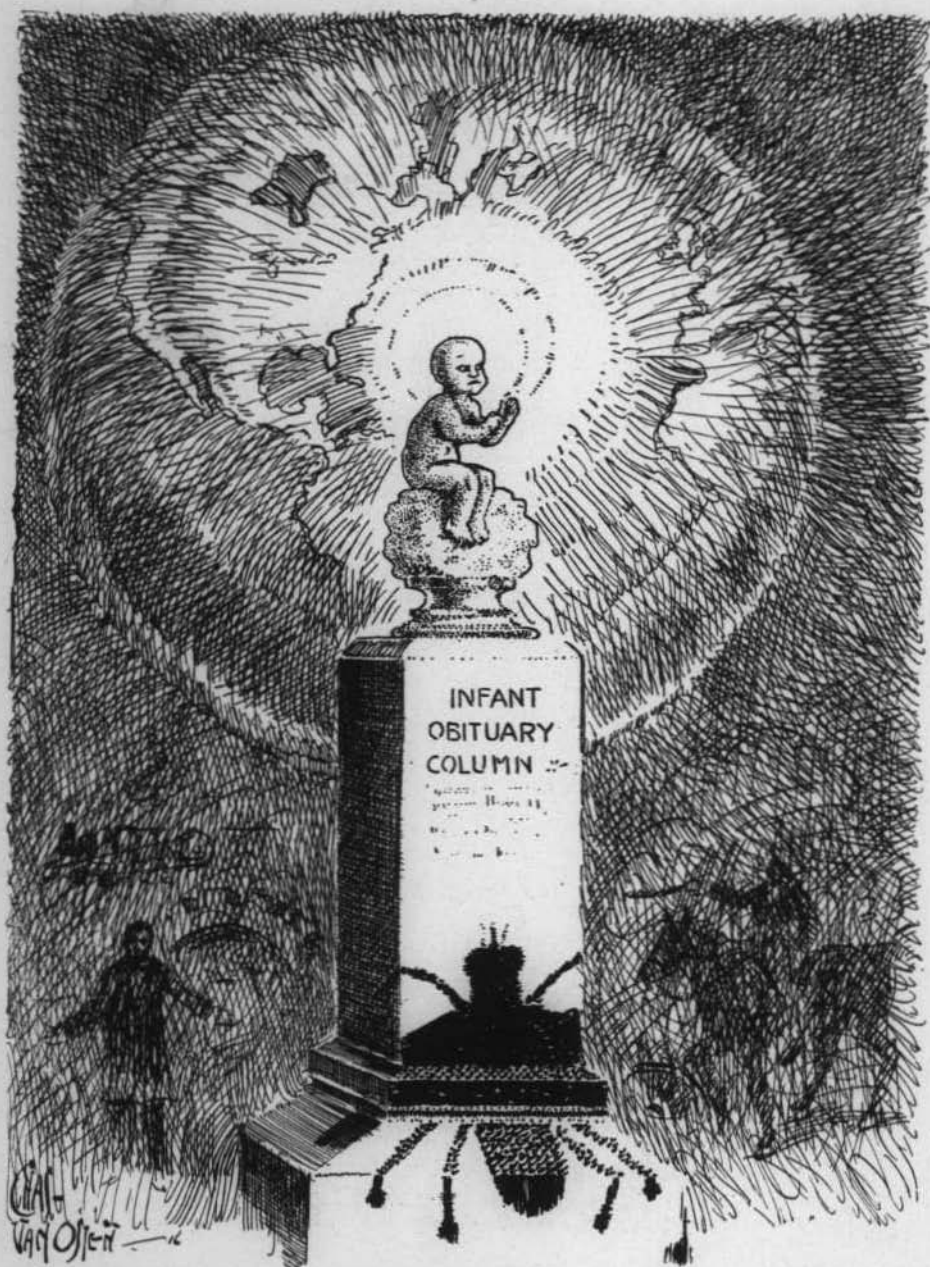
	C. C. Serum Distributed
Alachua	19,700 c. c.
Baker .....	..... c. c.
Bay	2,500 c. c.
Bradford	5,150 c. c.
Brevard .....	..... c. c.
Broward	1,700 c. c.
Calhoun	7,000 c. c.
Citrus	1,000 c. c.
Clay	7,900 c. c.
Columbia	5,550 c. c.
Dade	650 c. c.
DeSoto	3,050 c. c.
Duval	2,300 c. c.
Escambia	8,000 c. c.
Franklin .....	..... c. c.
Gadsden	9,350 c. c.
Hamilton	4,350 c. c.
Hernando	950 c. c.
Hillsborough	3,400 c. c.
Holmes	2,400 c. c.
Jackson	31,200 c. c.
Jefferson	8,200 c. c.
Lafayette	1,650 c. c.
Lake	1,750 c. c.
Lee .....	..... c. c.
Leon .....	..... c. c.
Levy	15,800 c. c.
Liberty	2,500 c. c.
Madison .....	..... c. c.
Manatee .....	..... c. c.
Marion	11,300 c. c.
Monroe .....	..... c. c.
Nassau .....	..... c. c.
Orange .....	..... c. c.
Osceola .....	..... c. c.
Palm Beach .....	..... c. c.
Pasco	2,150 c. c.
Pinellas .....	..... c. c.
Polk	1,750 c. c.
Putnam .....	..... c. c.
Santa Rosa	1,800 c. c.
Seminole .....	..... c. c.
St. Johns	400 c. c.
St. Lucie .....	..... c. c.
Sumter	1,000 c. c.
Suwannee	7,450 c. c.
Taylor .....	..... c. c.
Volusia .....	..... c. c.
Wakulla .....	..... c. c.
Walton	5,550 c. c.
Washington	9,600 c. c.

Total sold, 1,875 c. c.; Total.....187,050 c. c.

Estimated number of hogs treated, April.....	8,502
Estimated weight of hogs treated, April.....	518,622 lbs.
Amount of hog-cholera serum purchased during April.....	200,000 c. c.
Cost of serum purchased during April.....	\$1,300.00
Amount of serum distributed in 1916, to May 1.....	617,350 c. c.
Estimated number of hogs treated in 1916, to May 1.....	28,844
Estimated weight of hogs treated in 1916, to May 1.....	1,755,495 lbs.
Cost of serum purchased in 1916, to May 1.....	\$4,200.00

DETAILS PERFORMED BY THE VETERINARY DIVISION

April 12-18, testing 163 head cattle at Plant City for municipality; April 20-22, investigating Anthrax at Jay; April 23, filling two dipping vats at Grand Ridge; April 26, filling dipping vat at Jacksonville.



BENEFACTORS, INVENTIVE GENIUS OR
PROBABLY A WASHINGTON OR LINCOLN
ARE LOST IN THE DESTINY CARVED BY
THE FLY.





HEALTH NOTES

OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

STATE BOARD OF HEALTH

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June, 1916

No. 6 (New Series)

HON. FRANK J. FEARNSIDE, President
Palatka, Fla.

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Pensacola, Fla.

HON. C. G. MEMMINGER
Lakeland, Fla.

EDITED BY

JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

EXECUTIVE OFFICE

State Board of Health Building, Springfield Boulevard
Jacksonville

BRANCH OFFICES

ASSISTANTS TO THE STATE HEALTH OFFICER

Tampa Key West St. Augustine
Pensacola Gainesville Ocala

AGENTS

Miami Fernandina Palatka

BACTERIOLOGICAL LABORATORIES

CENTRAL LABORATORY

Jacksonville

BRANCH LABORATORIES

Tampa Pensacola Miami
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Publication 89, Hog Cholera, January, 1912, pp. 12.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
- Publication 102, Typhoid Fever in Tampa, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 24.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 121, Vital Statistics, All Florida Municipalities can have Vital Statistics, Leaflet, Reprint from Florida Health Notes, August, 1914.
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 137, Report of Surgeon in Charge of Work under the "Crippled Children" Act, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 8, illustrated.
- Publication 138, Annual Report of Veterinary Department of the State Board of Health of Florida, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 57.
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.
- Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.
- Publication 158, Malaria, April, 1916, pp. 4.
- Publication 159, Some Poultry Pests, April, 1916, pp. 10.
- Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).
- Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.
- Publication 163, Hog Cholera, pp. 30.

A HEALTH SERMON

It is not often that the ministers of God think to declare to the people of their pastorate, lessons in Christianity based on the principles of practical healthful living. There has come to the attention of the NOTES a sermon delivered recently by Rev. W. Bruce Doyle, of Plant City, having, as its text, I Corinthians 15:46: "Howbeit that is not first which is spiritual, but that which is natural, afterward that which is spiritual;" and, with the permission of the author, the NOTES takes pleasure in publishing his remarks herewith, which are a most concise and plain outline of these principles:

I CORINTHIANS 15:46

"Howbeit that is not first which is spiritual, but that which is natural, afterward that which is spiritual."

The natural comes first in creation. The Lord God formed the earth, he called to view the heavenly bodies, he made the flora and fauna of the earth and then made the Adam—all this was that which we call natural. Then God blew into the nostrils of Adam the breath of life and then Adam became a living soul—this was spiritual.

The natural comes first in thought. The babe stretches out its tiny hands and calls for the moon, it reaches for a toy and plays with the kitten, all this goes on for years before the child begins to think of God or contemplate his own soul.

The natural stands first in memory. Letting your mind run back over the childhood days you recall your earliest recollections. The thing furthestest back in your memory is a toy, a pet, a friend; an incident or some natural thing, it is not a dream of angels or a thought of God or a dread of demons.

The natural comes first, and of all nature the most important thing is the human body which is the temple of the Holy Ghost and in which the Son of God tabernacled himself. How great then should be the care of this physical man!

"Thou shalt not kill," says the law of Jehovah. The Catechism of the Westminster Assembly says that this Commandment "Requireth all lawful endeavors to preserve our own life and the life of others." If we would not kill then we must "endeavor to preserve" the life of others. If we take a rifle and go to a man's home and shoot him, he is dead. If we leave a barrel of water to stagnate in our back yard and breed mosquitoes which pass through a home where there is malarial fever, yellow fever or dengue fever and then after a while go on to a man's home and fill him with the germs of death, he is dead. In the jury box the cases may be viewed differently but it is all the same to the dead man.

Humanity advances rapidly in science. We have made a submarine and gone to sleep on the ocean floor; we have made an airship and sailed over the roof of the clouds; we have opened the gates of the frozen poles; we have reached the penetralia of every land, and suggested a new science, "Catalactics," the exchange of thoughts, the bartering of ideas. But we have advanced, Oh! so slowly in sanitation.

We think of the Babylonians as a cruel people who burned the sacred city of God's people, left Solomon's Temple in ashes, and put the Hebrews in slavery, but when the Babylonian army set out to do this they left a sewerage system at home.

Jonah did not want to preach in Ninevah. How many reasons he had we do not know but surely it was not on account of health conditions, for even the city of Ninevah had a sewerage system.

The Egyptians were hard hearted heathens. They worshipped frogs and prayed to calves and went into the Red Sea to slaughter the people of God, but they hatched eggs in incubators, laid sewer pipes and regulated the living quarters of domestic animals by law.

In the city of Rome to-day they tell us there is a sewer which carried away the refuse of the city five hundred years before Cæsar's decree sent Joseph and Mary down to Bethlehem.

The Franks in the days of Charlemagne heated their homes in winter with furnaces and were careful for ventilation. They did not live in houses with no heating facilities or work in stores without fires when it was cold enough to frost, and take cold, grippe, pleurisy, pneumonia and then send for the doctor and wonder why the preacher had not been to see them.

The city of Jerusalem as far back as Solomon's day had water-works and was careful to get uncontaminated water from the mountains. They brought down snow from Mount Hermon to cool the baby's milk and keep it sweet. They had a continual fire in the valley of Gehena where the refuse of the city was burned and not dumped out in a waste place as so many American towns do.

In public cleanliness, in quarantine regulations, in the science of cooling and warming, in the matter of sewerage, in the prevention of disease we have advanced but little beyond the ancients.

The laws of ancient Israel were largely sanitary laws. The seventy elders of Israel were health officers. The people of God from Moses to Christ had a State Board of Health and it was not composed alone of physicians, for every priest was a member of the Board. The book of Leviticus is a good text book on Hygiene. Perhaps there ought to be a preacher on every State Board of Health, whose duty it would be to preach cleanliness. "Cleanliness is next to Godliness," says the proverb; but it is more. Cleanliness is a part of Godliness.

Deuteronomy forbade the people eating anything which "dieth of itself." We Americans are too much advanced for that; but we do eat that which was dying of itself. We feed milk from tubercular cows to babies and half of the human race dies in infancy. Then we put a notice in the local paper that "The Lord saw fit to remove our darling babe."

The twenty-third chapter of Deuteronomy gave laws for soldiers in camp, laws which would make the spread of typhoid fever and numerous other intestinal disorders impossible. Yet in our war with Spain it has been said that we lost as many men during that war from sickness as from gunfire.

Leviticus provided that a leper should be quarantined, should have his clothing perforated, should wear his hair loose and must hold something over his mouth when he spoke, to say nothing of when he coughed or sneezed. His clothing had to be burned when he was dead—no pious packing of it to be sent to the poor or to an orphan home.

Saddles and chairs in which certain afflicted people sat were to be washed and dried before being used by a healthy person. Moses may not have known about germs but the God of Moses certainly put laws in the Bible that make for the suppression and destruction of deadly bacteria.

In the Prophecy of Isaiah we read about domestic animals eating wholesome food "which hath been winnowed with the shovel and with the fork," and now some twenty-six hundred years afterward, the cows drink and wade in polluted water and eat mildewed hay and a million babes drink the carelessly handled milk and die and an obituary lays the blame on God, "He hath removed the soul of our deceased child."

But if a health officer puts the danger stamp on a man's dairy or quarantines his pigs, or orders a pool drained back of his barn, or a stable to be disinfected, then somebody bellows like a bull of Bashan and away he goes to the ballot box with a vote against the Board of Health and against God, and his neighbors talk about governmental paternalism and personal liberty.

There was a strange disease in old Egypt, a wrinkling of the skin so as to resemble that of an elephant. Was it pellagra? Livy said "Egypti peculiar hoc malum elephantiasis," the peculiar malady of Egypt is elephantiasis. So when the Hebrews came down to sojourn Joseph sent them off to themselves in the land of Goshen.

The Hebrews would not drink milk if a Samaritan had milked the cow, yet the Samaritans had no public drinking cup at Jacob's well when Jesus sat there thirsty at noon. Those were samaritans two

thousands years ago and here we are just beginning the fight on the roller towel and the community dipper. The Lord Jesus was "The Great Physician." He went about healing all manner of disease and the Bible from which he preached taught its prevention. We cannot divorce religion from sanitation. Public Health is a theme which God put in the pulpit. He is the God of the living, not of the dead; the God of the body as well as the soul. No Gospel Minister can be true to The Great Physician and forever dodge in his preaching the matter of public health and the question of disease prevention.

We are not always consistent. If a man's hen roost is visited by a somnambulist from the tribe of Ham we think that it is all right for the negro parson to take a text from Exodus and preach about stealing, but it is considered improper for a white preacher to take a text from Leviticus and preach about the poultry yard itself.

It is considered becoming for the pastor to read from John's Gospel in the parlor and pray, but all out of place for him to read from Deuteronomy on the back porch and talk. It is good form for the minister to quote John three-sixteen to the children on the front porch, but a very delicate matter if he quotes Leviticus fourteen-nine to the servants on the back porch. Yet all scripture was given by inspiration of God and the minister is ordained to declare the whole Council of God.

Christianity demands a sanitary yard, a clean stable, pure drinking water, for man and beast and wholesome food. It demands that war be waged upon all common carriers of death, upon every stagnant pool, upon every incubator of deadly bacteria and upon every business that puts the monetary profit of the individual above the health of the public.

Let us not fall away from the oracles of God but co-operate with the skilled physicians in securing for us and our neighbors a clean city wherein no unclean thing dwelleth and where death is not wafted upon the wind. For "that is not first which is spiritual, but that which is natural afterward that which is spiritual."

(Signed) W. BRUCE DOYLE.

Plant City, Florida,

Sabbath, June the fourth, 1916.

Summary of Public Health Administration, May

SOUTHWESTERN DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Supervision of inspections by sanitary patrolman.

Clearwater: Sanitary inspection of town. Inspection of stores and eating places; all complying with screening law.

Dunedin: Sanitary inspection of town; all stores complying with state law; sanitary condition good.

Tarpon Springs: Sanitary inspection of Greek section; violations of state sanitary laws ordered abated. American section in good sanitary condition.

Ft. Meade: Sanitary inspection of town; conditions good; all stores found complying with law.

Pembroke: Sanitary inspection of town; conditions good; all stores found complying with law.

Bartow: Bartow reinspected; stores and eating places found in good sanitary condition, complying with state sanitary laws.

Homeland: Sanitary inspection of town.

Winter Haven: Sanitary inspection of town; interview with town clerk regarding sanitary conditions; inspection of nuisance in shape of stable, and abatement effected.

Lakeland: Sanitary reinspection; found in good condition, stores complying with sanitary laws.

Plant City: Sanitary reinspection; found in good condition; all stores and eating places complying with state law.

Hillsborough County: Investigation smallpox case; differential diagnosis; requested by Tampa city health officer.

Sarasota: Sanitary inspection; stores found to be complying with sanitary laws with few exceptions; matter taken up again with these stores in regard to compliance with law.

Bradentown: Sanitary reinspection of town; interview with city health officer regarding health conditions; inspection of all stores, which were found complying with law. Matter of sanitary surface closets taken up with authorities.

Palmetto: Sanitary reinspection of town; all stores inspected and found complying with screen law; conference with city clerk in regard to open closets.

Ellenton: Sanitary inspection; conference with city clerk in regard to health conditions and disease precautions.

Lakeland: Investigation suspected case smallpox.

St. Petersburg: Sanitary inspection of city. Conference with city clerk and member board of commissioners. Inspection of stores for screen law.

Pinellas Park: Sanitary inspection; inspection of open closets and stores. Matter of enacting sanitary ordinance taken up with mayor and town clerk.

Largo: Sanitary inspection of town. Matter of screening surface closets taken up again with authorities.

Port Tampa: Sanitary inspection. Conference with city physician. All stores inspected for screen law.

Haines City: Sanitary inspection of town. Most of stores in good sanitary condition; those not complying with screen law ordered to screen at once.

Safety Harbor: Sanitary inspection of town; stores inspected. Health conditions investigated.

WESTERN DISTRICT

Pensacola: Routine work, office of Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections by sanitary patrolman as follows: (violations of sanitary laws ordered abated). Screening Law—restaurants 4, lunch counters 2, kitchens 4, meat shops 5, butcher shops 1, grocery stores 4, bakeries 1, fruit stands 16. Surface Closet and Water Carriage Laws—private residences 12. Communicable diseases—typhoid fever 4, tuberculosis 8, fumigations 4.

DeFuniak Springs: Conference with Sheriff of County on screening law and other violations.

Ponce de Leon: Conference with sheriff of county on screening laws and other violations.

Argyle: Conference with sheriff of county on screening laws and other health violations.

Westville: Conference with sheriff of county on screening laws and other health violations.

Caryville: Conference with sheriff of county on screening laws and other health violations.

Bonifay: Conference with sheriff of county on screening laws and other health violations.

Chipley: Conference with Mayor and City Council on screening laws. Survey of city and recommendations made for abatement of all violations. Specimen of water sent to laboratory for bacterial test.

SOUTH TROPIC DISTRICT

Key West: Routine work, office of Assistant to the State Health Officer. Routine work in laboratory. Conference with prosecuting attorney relative to enforcement of toilet law; prosecution of violators. Supervision over inspections by sanitary patrolman.

Delray: Conference with city health officer relative to sanitary conditions, and the enforcement of state sanitary laws.

Boynton: Sanitary inspection of town.

Lake Worth: Sanitary inspection of town.

Ft. Lauderdale: Investigation and inspection of sanitary facilities of the town.

SOUTH CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer. Inspection of alleged nuisance in shape of pool of water, which was a breeding place for mosquitoes; nuisance abated. Sanitary inspection of site for a proposed public park.

Bushnell: Conference with Mayor and Councilmen concerning screening of surface closets, and other sanitary measures.

Webster: Conference with Mayor and Councilmen concerning screening of surface closets and other sanitary measures.

Brooksville: Conference with Mayor and Councilmen concerning screening of surface closets and other sanitary measures.

CENTRAL DISTRICT

Gainesville: Routine work, office of Assistant to the State Health Officer. Sanitary inspection of city.

Micanopy, Hawthorne, Waldo, Alachua, High Springs, Newberry, Archer, Trenton: Lectures on Hygiene to the High Schools. (These towns visited five times during the month for the purpose of delivering these lectures.

Greenville, Madison, Monticello and adjacent country: Investigation reported smallpox.

Trenton, Newberry, High Springs, Alachua, Micanopy, Hawthorne, Waldo, Archer, Meredith, Bronson, Otter Creek, Sumner, Cedar Keys, Williston, Lake Butler, Lake City, White Springs, Live Oak: Monthly sanitary inspection.

Tampa: Consultations with Tampa physicians regarding acidosis appearing in Gainesville and other points in district.

EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer. Inspection of grocery stores, fruit stands, etc., and screening law enforced.

New Smyrna: Work resumed on mosquito survey of New Smyrna, Oak Hill, Hawks Park and intervening points on coast. Sanitary inspection of New Smyrna.

Lake Helen: Inspection of meat shops and grocery stores for screening law.

DeLand: Inspection of meat shops, fruit stands and grocery stores in connection with screening law.

Orange City: Inspection of meat shops and grocery stores in connection with screening law.

Hastings: Sanitary inspection of town. Conference with city officials and physicians; recommendations made for sanitary improvement.

Palatka: Interview with President of the State Board of Health, City Physician and County Physician. Inspection of grocery stores, fruit stands, etc., in connection with screening law. Recommendations made for making privies in colored section of town flyproof.

WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer. Conference with city physician. Sanitary inspection of city and in county. Management of pellagra and hookworm cases.

Woodville, Wakulla, St. Marks, Midway: Investigation sanitary and health conditions.

Greenville: Investigation of eruptive diseases.

Monticello: Inspection of water works and investigation of sanitary conditions. Conference with city physician.

Quincy: Inspection sanitary conditions; conference with city physician.

Crawfordville: Treatment of cases of pellagra. Investigation sanitary and health conditions.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during May: Pierson, DeLeon Springs, Glenwood, Lakeland, Bartow, Ft. Meade, Bowling Green, Wauchula, Arcadia, Nocatee, Ft. Ogden, Punta Gorda, Ft. Myers, Ft. Meade, Mulberry, Winston, Plant City, Seffner, Tampa, Auburndale, Lake Alfred, Winter Haven, Haines City, Lake Wailes, Frostproof, Avon Park, Sebring, Loughman, Kissimmee.

Total number towns visited Jan. 1 to June 1, 1916..... 117

PUBLICITY AND PUBLICATIONS

Monthly Bulletin "Health Notes," Vol. XI, No. 5, May, 1916, pp. 28. Press service bulletins to Florida newspapers: May 3, "Flies;" May 10, "Noblesse Oblige;" May 17, "The Elections;" May 24, "Health and Politics;" May 31, "Maternal Responsibility."

Publications out in May: No. 161, Imhoff Tanks, reprint from Vol. XI, No. 3, Health Notes. No. 162, Tick Eradication, reprint from Vol. XI, No. 3, Health Notes. No. 163, Hog Cholera.

Distribution of literature during May:

Mailed upon request.....	1,077
Distributed on Educational Health Exhibit Train.....	18,075
Press service bulletins to Florida newspapers (5 issues).....	1,375
Health Notes, May, mailing list.....	10,150

Total number pieces distributed.....30,677

Number pieces literature distributed in 1916 to June 1.....96,110

SMALLPOX

Reported cases of smallpox in Florida, May, 1916:

City Point, Brevard County.....	1
Greenville, Madison County.....	3
Jacksonville, Duval County.....	6
Rogers, Volusia County.....	1

Total11
 Total number cases reported in 1916 to June 1.....84

DISTRICT TUBERCULOSIS NURSE INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, May 31, 1916

Residence of Cases Visited to Date by Districts	Total Number of Patients Under Instruction Last Report	New Cases Found Month Ended	Cases Found to Have Died	Cases Removed	Cases Apparently Cured	Total Number of Patients in Districts Under Instruction to Date	Total Number of Cases Following Instruction
Western	138	10	32	1	..	115	58
Southwestern	188	28	4	7	..	205	142
North Central	261	16	9	1	..	267	202
West Central	185	33	5	1	11	201	105
East Coast	323	32	10	16	9	320	320
Total	1,095	119	60	26	20	1,108	827

BIOLOGICAL PRODUCTS

Distribution of Biological Products during May (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only). Number of persons receiving treatment:

County and Town	Anti-Smallpox Vaccine	Anti-Rabic Vaccine	Anti-Typhoid Vaccine	Diphtheria Antitoxin Curative and Immunizing	Tetanus Antitoxin Immunizing
ALACHUA					
High Springs.....	..	1	..	..	..
BRADFORD					
Starke .....	..	1	..	..	..
BREVARD					
Cocoa	10	..	..	..	..
Titusville .....	..	1	..	..	..
DADE					
Miami	100	..	..	..	..
DUVAL					
Jacksonville	129	..	..	..	3
Mayport	10	..	..	..	..
South Jacksonville.....	30	..	..	..	..
ESCAMBIA					
Pensacola .....	..	..	5	..	..
GADSDEN					
Amsterdam, Ga., (P. O.)....	..	1	..	..	..
HAMILTON					
Jasper	10	..	..	..	..
HILLSBOROUGH					
Tampa .....	..	1	..	..	..
MADISON					
Greenville	10	1	..	..	..
MANATEE					
Manatee	10	..	..	..	..
MONROE					
Key West.....	..	..	96	1	..
PUTNAM					
Palatka .....	..	..	..	2	..
SEMINOLE					
Chuluota	10	..	..	..	..
Sanford .....	..	..	..	2	..
SAINT JOHNS					
Hastings	100	..	..	..	..
St. Augustine.....	100	..	..	..	..
VOLUSIA					
Daytona .....	..	..	1	..	..
New Smyrna	40	..	..	..	..
WALTON					
Lakewood .....	..	..	..	1	..
Total	559	6	102	6	3

Total number persons receiving anti-smallpox vaccine in 1916 to June 1.....3,261
 Total number persons receiving Pasteur treatment in 1916 to June 1.....19
 Total number persons receiving anti-typhoid vaccine in 1916 to June 1.....149
 Total number persons receiving diphtheria antitoxin in 1916 to June 1.....53
 Total number persons receiving tetanus antitoxin in 1916 to June 1.....3

CRIPPLED CHILDREN

NAMES	In St. Luke's 5-1-16	In Brewster (Col.) 5-1-16	Outside Treatment 5-1-16	Applications Received	Admitted St. Luke's	Admitted Brewster	Admitted for Office Treatment	Examined, Not Admitted	Total Cases During Month	Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment June 1, 1916
F. P.	1	..	..	..	..	..	..	..	1	Daily dressings.....	.....	Tbc. Spine.....	1
H. M.	1	..	..	..	..	..	..	..	1	Daily dressings.....	.....	Tbc. Ilium.....	1
W. W.	..	1	..	..	..	..	..	..	1	.....	.....	Polio. Paralysis.	1
B. K.	..	1	..	Transferred to St. Luke's 5-29-16	..	..	..	..	1	Tenotomy right	.....	Club Feet.....	1
R. W.	1	..	..	..	..	..	..	..	1	Cast 31st.....	.....	Deformity Spastic Paralysis..	1
O. D.	1	..	..	..	..	..	..	..	1	Massage exercises..	.....	Tbc. Spine.....	1
D. W.	..	1	..	..	..	..	..	..	1	Daily dressings.....	.....	Club Feet.....	1
F. B.	..	1	..	..	..	..	..	..	1	.....	Cured 5-30.....	Ankylosis Knee.	1
S. B.	..	1	..	..	..	..	..	..	1	.....	Greatly improved 30th.....	Polio Paralysis.	1
A. P.	1	..	..	..	..	..	..	..	1	Daily dressings.....	.....	Osteomyelitis ..	1
W. S.	..	1	..	..	..	..	..	..	1	Braces 5-29.....	Cured 5-29.....	Club Foot.....	1
H. R.	1	..	..	Transferred outside 5-6-16	..	..	..	..	1	Cast 5-5.....	.....	Tbc. Hip.....	1
F. M.	1	..	..	..	..	..	..	..	1	.....	Cured 5-15.....	Fracture Femur	1
L. S.	1	..	..	..	..	..	..	..	1	Cast 5-16.....	.....	Polio. Paralysis.	1
C. DuB.	..	..	..	27th	..	..	..	..	1	Operation Brain Decompression 31st..	.....	Brain Tumor	1
D. M.	..	..	..	27th	..	..	..	..	1	.....	.....	Paralysis	1
.....	..	..	..	..	..	..	..	..	1	.....	.....	Club Feet.....	1
Total	8	6	..	2	..	..	..	..	16	.....	4	.....	12

BACTERIOLOGICAL LABORATORIES
SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Total
Animal Parasites.....	175	131	37	1	7	351
Diphtheria	63	76	19	3	4	165
Gonorrhoea	87	47	43	1	6	184
Malaria	214	177	34	..	14	439
Pathological	21	6	4	..	..	31
Rabies	21	..	..	..	..	17
Tuberculosis	169	86	46	1	16	318
Typhoid	238	132	44	1	15	430
Water: Bacterial Ex.....	28	4	..	..	16	48
Sanitary Chem. Ex.....	12	2	..	..	..	14
Wasserman	106	102	11	..	8	227
Miscellaneous	66	27	16	1	87	197
	1,196	790	254	8	173	2,421

Total number of specimens examined by the Laboratories of the State Board of Health of Florida, during May, 1916.....2,421

Tallahassee laboratory closed during May.

DISTRIBUTION OF DISEASES DETERMINED BY BACTERIOLOGICAL
LABORATORIES, MAY, 1916

(MALARIA)

TOWN	Diphtheria	Gonorrhoea	Etiocoautumna	Quarant	Tertian	Species Not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Trichinuris	Ameba	Rabies	Wasserman
Arcadia							1							
Arran								1						
Avon Park							3		1					
Bagdad								1						
Bartow							2	1	1					
Boardman									2					
Bradentown							1		4					
Brewster								1						
Bronson							2							
Brooksville									2					
Bunnell							1							
Campbellton								1						
Chattahoochee														5
Citra							2							
Clearwater		1			1									
Daytona							1							
Fellsmere								1						
Fernandina									1					
Ft. Myers									1					
Ft. Pierce								1						
Ft. Barancas								1						
Gainesville							1							
Graceville								1						
Hastings								1						
Jacksonville		28			3		7	17	9	1			2	32
South Jacksonville		1						1						
Jasper							1	1						
Key West	1	1					3							1
Lakeland								2						
Lamont													1	
Largo									1					
Laurel Hill		1												
Live Oak							1							1
Loughman								1						
Madison							1	1						
Manatee									1					
Mandarin					1				3					
Marianna							1							
Miami	1	3												2
Monticello							1		1					
New Smyrna							1		2				1	
Ocala							1							
Okeechobee									5					
Oklawaha									1					
Oneca									1					
Oriando								1	5					
Oxford								1	3					
Ozona										1				
Palatka														1
Pensacola		12				1	4	7	15					
Perrine														1
Perry								2	1					
Plant City		2						1	1					
Quincy		1					3	1						
St. Augustine								2						
Sanford		1							8					1
Sebring								1						
Starke								1	1					
Tallahassee								1	1					
Tampa	5	17			3		4	12	13	3	2	2		30
West Tampa										2	1			
Titusville													1	
Wauchula							2							
Wellborn								1						
Wewahitchka		1												
Wildwood							1							
Williston		1					2		3					
Zolfo		2												
Total	10	69			8	1	47	63	88	7	3	2	5	74

VETERINARY DIVISION

TICK ERADICATION

Cattle dipping vats reported constructed during May, 1916:	
Bradford County.....	3
Jackson County.....	1
Total number of vats reported constructed to June 1, 1916.....	106

REPORT OF LOCAL EXPENSE IN TICK ERADICATION WORK IN ESCAMBIA COUNTY

For Month of May, 1916, In Escambia County, State of Florida	
Number of State Inspectors.....	1
Total Salary for part of month.....	\$66.66
Number of County Inspectors.....	2
Total salary for month.....	\$100.00
Number vats constructed:	
By county.....	4
By private parties.....	0
By community subscription.....	1
Total expense.....	\$230.00
Remarks:—First month of preliminary and educational work	
Grand Total Expense.....	\$396.66

GLANDERS

Diagnosed by Veterinarian during May, 1916:	
Jacksonville, Duval County.....	1 horse, \$75.00
Total number of cases in 1916, to June 1.....	6

INTRASTATE SHIPMENTS OF DIPPED CATTLE INTO DADE AND BROWARD COUNTIES

May 12, Jacksonville to Miami.....	5 cattle, 1 horse
May 30, Jacksonville to Miami.....	15 cattle

IMPORTATION OF CERTIFIED LIVE STOCK

Totals: horses, 78; mules, 78; cattle, 156; hogs, 55.....	367
Total number of shipments.....	26

EXPORTATION OF CERTIFIED LIVE STOCK

Totals: horses, 6; mules, 6; cattle, 17.....	29
Total number of shipments.....	7

HOG CHOLERA SERUM DISTRIBUTED, MAY, 1916

	C. C. Serum Distributed
Alachua	19,900 c. c.
Baker .....	..... c. c.
Bay	4,000 c. c.
Bradford	22,950 c. c.
Brevard .....	..... c. c.
Broward .....	..... c. c.
Calhoun	3,650 c. c.
Citrus	4,850 c. c.
Clay	5,700 c. c.
Columbia	1,700 c. c.
Dade .....	..... c. c.
DeSoto	10,550 c. c.
Duval	650 c. c.
Escambia	5,000 c. c.
Franklin .....	..... c. c.
Gadsden	11,700 c. c.
Hamilton	3,000 c. c.
Hernando .....	..... c. c.
Hillsborough	1,150 c. c.
Holmes	19,300 c. c.
Jackson	18,250 c. c.
Jefferson	6,000 c. c.
LaFayette	1,000 c. c.
Lake .....	..... c. c.
Lee .....	..... c. c.
Leon	3,650 c. c.
Levy	10,750 c. c.
Liberty	1,550 c. c.
Madison	1,600 c. c.
Manatee .....	..... c. c.
Marion	17,500 c. c.
Monroe .....	..... c. c.
Nassau	1,150 c. c.
Orange	1,000 c. c.
Osceola .....	..... c. c.
Palm Beach .....	..... c. c.
Pasco	500 c. c.
Pinellas .....	..... c. c.
Polk	8,000 c. c.
Putnam	12,000 c. c.
Santa Rosa	3,500 c. c.
Seminole .....	..... c. c.
St. Johns .....	..... c. c.
St. Lucie .....	..... c. c.
Sumter	7,150 c. c.
Suwanee	3,850 c. c.
Taylor .....	..... c. c.
Volusia	2,500 c. c.
Wakulla .....	..... c. c.
Walton	7,450 c. c.
Washington	9,550 c. c.
Total sold, 3,466 c. c.; Total	221,450 c. c.

Estimated number of hogs treated, May	10,065
Estimated weight of hogs treated, May	613,965 lbs.
Amount of hog-cholera serum purchased during May	200,000 c. c.
Cost of hog-cholera serum purchased during May	\$1,300.00
Amount of serum distributed in 1916, to June 1	829,200 c. c.
Estimated number of hogs treated in 1916, to June 1	38,909
Estimated weight of hogs treated in 1916, to June 1	2,369,460 lbs.
Cost of serum purchased in 1916, to June 1	\$5,400.00

DETAILS PERFORMED BY THE VETERINARY DIVISION

Six hundred and four head of cattle vaccinated twice for anthrax; one hundred and seventy head also given serum simultaneously, in Santa Rosa County; investigated cattle disease at Clarksville; 28 head cattle tested for tuberculosis in Jacksonville; 14 mules and 8 horses inspected for ticks; 17 cows tested and dipped for interstate shipment; 20 cows dipped and tested for shipment to Miami; 8 head cattle tested for tuberculosis in Jacksonville; 21 days employed in vat construction in Escambia County; preparing cattle dip at McIntosh; investigation of reported anthrax at Ocala; six days inspecting cattle in Dade and Broward Counties; testing 168 head dairy cattle at Gainesville.

Vital Statistics

During the latter part of April 1914 the State Board of Health sent out a draft of a Model Ordinance to the various municipalities of the State. The presentation of the Model Ordinance immediately created a great deal of interest in this branch of public health work. Persistent efforts on the part of the State Board of Health made it possible to secure the passage of the model ordinance providing for the registration of births and deaths during 1915 in 128 of the 193 municipalities of Florida.

According to the Florida State Census of July 1st, 1915, the municipalities reporting births and deaths had an aggregate population of 347,076 which was 37.8 per cent of the total population of the State. Of the aggregate population of the municipalities reporting births and deaths, 62.1 per cent was white and 37.9 per cent colored.

Through the adoption of the Model Ordinance by so many of the municipalities, embracing more than a third of the entire population, sufficient interest was created to make it possible to secure a law which provided for the registration of births and deaths throughout the State. Such a law was enacted by the 1915 session of the Florida Legislature and was drafted along the lines of the Model Bill which has been approved by the Bureau of the Census, American Public Health Association, American Medical Association and many other organizations, having particular interest in the welfare of all of the people.

The mere enactment of this law does not insure successful registration of births and deaths. A large part of the responsibility for the results to be obtained under this law rests with the people of the State of Florida.

NON-RESIDENT DEATHS

The salubrious sub-tropical climate of Florida is responsible for a large number of people coming into the State during the winter months. Among these winter residents there are many invalids and it naturally follows that many deaths occur in Florida among this class each year. With no provision for the exclusion of such deaths, it means that they are charged to the municipality in which they occur. There are a sufficient number of these deaths each winter to materially affect the death rate for the State. The necessity for the exclusion of non-resident deaths is well understood, and it is to be hoped that at an early date some acceptable statistical definition of a non-resident death may be adopted, in order that such deaths may be excluded in attempting to ascertain the actual death rates for Florida municipalities.

WHAT ARE THE HEALTH CONDITIONS OF FLORIDA?

The health conditions of Florida or any state or community cannot be known until a complete registration of deaths is made. Advantage has been taken of the Southern States because of the fact that deaths were not registered. It has made it possible for land agents of railroad companies to persuade the movement of the population to the Western

States. This has created a prejudice against the South as a place to live and has existed for many years. The one disease especially used in creating this impression is malaria. They seem to lose sight of the fact that responsibility for malaria rests largely on the individual. This is also true of practically every communicable disease. The time has come when we must know the exact health conditions of the State and each of its communities. If the desired conditions exist we should be able to state such facts to those outside the State, and eliminate the existing prejudice. If conditions are not what they should be, we should know this in order that steps may be taken for correcting the conditions.

When we are able to show through official figures that the desired health conditions exist in the State, it will mean the addition of many desirable citizens to our population.

FLORIDA VITAL STATISTICS LAW

At the 1915 session of the legislature a law was enacted requiring the registration of all births and deaths in the State of Florida. The success of this law depends entirely upon the cooperation that the State Board of Health receives in its enforcement. This law is of special interest to all commercial organization of the State. The Vital Statistics Law will be put into operation on or about September first of the present year. At that time approximately seven hundred Local Registrars will have been appointed. Each Local Registrar will have a well defined territory and he will be held responsible for seeing that each birth and death that occurs in his territory is properly reported.

The law provides that each death must be reported and a permit for burial or removal obtained before making any disposition of the body; that each birth must be reported by the physician, midwife or parents within ten days after the date of birth and that the report of births and deaths shall be made to the Local Registrar in whose territory they occur.

POPULATION

In presenting birth and death rates of the municipalities making reports during the year 1915, it was deemed advisable to use the Florida State Census rather than estimates made by the method adopted by the Bureau of the Census. It is not known whether there would be much difference between the State Census and the estimated population for the entire area reporting, but there were many discrepancies which discouraged the use of such estimates when the figures of the State Census were available. The following tables show a comparison of the Florida State Census with the estimates made according to the Census Bureau method for the five largest cities in Florida.

POPULATION OF FLORIDA'S FIVE LARGEST CITIES

AREA	July 1, 1915					
	Florida State Census			U. S. Census Bureau's Estimate		
	Total	White	Negro	Total	White	Negro
Total.....	172,316	103,974	68,342	179,306	109,328	69,978
Jacksonville	66,850	30,798	36,052	73,137	35,909	37,228
Tampa	48,160	36,310	11,950	51,521	39,259	12,262
Pensacola	23,219	13,426	9,793	25,742	14,290	11,452
Key West.....	18,495	13,624	4,871	21,437	15,487	5,950
Miami	15,592	9,916	5,676	7,469	4,383	3,086

It will be noted that the estimates for the first four cities exceed the actual population from 3.3 to 13.9 per cent, whereas, that for the city of Miami was less than half the actual population as shown by the State Census.

DEATH RATES FOR ALL CAUSES OF DEATH PER 1,000 POPULATION BASED ON STATE CENSUS AND ESTIMATED POPULATION

AREA	Florida State Census			U. S. Census Bureau's Estimate		
	Total	White	Negro	Total	White	Negro
Total.....	17.7	14.6	22.4	17.0	13.9	21.9
Jacksonville	20.2	17.7	22.8	18.5	14.8	22.1
Tampa	15.5	13.8	20.7	14.5	12.7	20.2
Pensacola	18.3	13.6	24.7	16.5	12.7	21.0
Key West.....	15.5	14.3	18.6	13.4	12.6	15.2
Miami	15.6	11.7	22.5	32.5	26.4	41.3

Death rates based on the population shown by the State Census as compared with estimated population shows some great differences. In no city included in the above group is the difference in the death rates less than 1.0 per thousand population, while the difference for Miami is 16.9. The rate based on the Florida State Census being 15.6 as compared with a rate of 32.5 based on the estimated population.

The following table shows the number of municipalities embraced in each population group. Of the 64 municipalities which did not make reports of births and deaths during the year 1915, only 15 had a population of more than 1,000. Of this number, only two (Arcadia and Live Oak) had a population of more than 2,500.

FLORIDA STATE CENSUS

(As of July 1st, 1915)

	Total	White	Negro
All Municipalities*	348,070	215,989	132,081

MUNICIPALITIES OVER 10,000 POPULATION

	Total	White	Negro
Total	172,316	103,974	68,342
Jacksonville	66,850	30,798	36,052
Tampa	48,160	36,210	11,950
Pensacola	23,219	13,426	9,793
Key West	18,495	13,624	4,871
Miami	15,592	9,916	5,676

MUNICIPALITIES 5,000 to 10,000 POPULATION

	Total	White	Negro
Total	51,528	33,005	18,523
West Tampa	7,837	6,867	970
Lakeland	7,287	4,760	2,527
St. Petersburg	7,186	4,897	2,289
Gainesville	6,736	3,609	3,127
Orlando	6,448	4,058	2,390
St. Augustine	5,171	3,833	1,638
Ocala	5,370	2,717	2,653
Tallahassee	5,193	2,264	2,929

MUNICIPALITIES 2,500 to 5,000 POPULATION

	Total	White	Negro
Total	52,524	28,524	24,000
Sanford	4,998	2,494	2,504
Palatka	4,622	2,097	2,525
Daytona	4,526	2,033	2,493
Kissimmee	4,221	3,224	997
West Palm Beach	4,090	2,307	1,783
DeLand	3,490	2,054	1,436
Quincy	3,451	1,125	2,326
Lake City	3,422	1,793	1,629
Bartow	3,412	1,994	1,418
Apalachicola	3,400	1,673	1,727
Bradentown	3,305	2,268	1,037
Fort Myers	3,244	2,220	1,024
Plant City	3,229	2,084	1,145
Fernandina	3,114	1,158	1,956

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	White	Negro
Total	46,497	33,099	13,398
Marianna	2,357	1,172	1,185
Fort Meade	2,150	1,542	608
DeFuniak Springs	2,142	1,441	701
St. Cloud	2,080	2,080	...
Panama City	2,013	1,461	552
Dade City	1,950	1,336	614
Fort Pierce	1,942	1,293	649
Clearwater	1,932	1,199	733
Tarpon Springs	1,938	1,420	518
Fort Lauderdale	1,870	1,250	620
Wauchula	1,839	1,831	8
Sarasota	1,682	1,173	509
Jasper	1,631	930	701
Chipley	1,571	1,001	570
East Millville	1,522	1,122	400
South Jacksonville	1,522	1,349	173
Manatee	1,487	724	763
Zephyrhills	1,450	1,406	44
Milton	1,415	928	487
St. Andrews	1,400	1,047	353
Leesburg	1,360	896	464
Titusville	1,310	813	497
Lynn Haven	1,250	1,182	68
Starke	1,239	1,014	225
Winter Haven	1,226	1,119	107
Eustis	1,148	725	423
Port Tampa City	1,071	590	481
Newberry	1,000	360	640
Pablo Beach	1,000	695	305

*The term "All Municipalities" does not include all of the 193 municipalities of the State, but only the 128 municipalities which reported births and deaths during the year 1915.

MUNICIPALITIES 500 TO 1,000 POPULATION

Total	Total	White	Negro
14,716	10,367	4,349	
Okeechobee	982	902	80
Carrabelle	950	655	295
Fellsmere	898	689	209
Ormond	857	411	446
Delray	839	421	418
Lake Butler	832	570	262
Noma	832	634	198
Crescent City	809	466	343
Winter Park	787	400	387
Lake Helen	786	336	450
Lake Worth	612	612	...
Stuart	599	484	115
Apopka	598	295	303
Daytona Beach	582	524	58
Mount Dora	576	403	173
Largo	552	504	48
Eau Gallie	543	500	43
Lawtey	532	299	233
Umatilla	527	527	...
Dania	512	338	174
Auburndale	511	427	84

MUNICIPALITIES UNDER 500 POPULATION

Total	Total	White	Negro
9,495	7,020	2,475	
Center Hill	495	396	99
Pompano	484	257	227
Callahan	483	347	136
Tavares	449	370	79
Dunedin	429	358	71
Avon Park	418	394	24
Branford	411	217	194
Melbourne	408	404	4
Citra	400	215	185
Sebring	398	356	42
Cottondale	392	240	152
Coleman	389	249	140
Florida City	368	307	61
Macclenny	368	298	70
Interlachen	350	147	203
Zolfo	350	284	66
Bushnell	343	272	71
Wellborn	341	262	79
Laurel Hill	300	288	12
Greensboro	297	227	70
Ponce de Leon	295	240	55
Cypress	289	213	76
Pinellas Park	223	179	44
Taft	216	88	128
Reddick	191	126	65
Belleview	182	182	...
Eatonville	122	...	122
Glendale	104	104	...

Births

During the year 1915 a report of 7,633 births exclusive of stillbirths were received, making a rate of 21.9 per thousand population. Of this number, 5,478 were white and 2,154 were colored, making a respective birth rate of 25.4 and 16.3. The highest birth rate for any population group was that of 25.7 for the cities having a population of 10,000 and over. The white rate in this group was 29.2 and the colored 20.4. The highest birth rate for any city in this group was for Tampa, 28.7, with a white rate of 31.8. The white rate of 31.2 for Jacksonville was only slightly lower. The lowest birth rate in this group of municipalities was that of 22.4 for Miami. This was the only city in which the colored rate (24.0) exceeded the white rate (21.4). The highest birth rate shown for any municipality having a population of 1,000 or more was that of 42.3 for West Tampa, the white rate being 43.6 and the colored 29.0.

BIRTHS

(Stillbirths Excluded)

	Total	Total Births White	Negro	Rate per 1,000 Population Total	White	Negro
All Municipalities*	7,632	5,478	2,154	21.9	25.4	16.3

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Births White	Negro	Rate per 1,000 Population Total	White	Negro
Total.....	4,429	3,037	1,392	25.7	29.2	20.4
Jacksonville	1,695	960	735	25.3	31.2	20.4
Tampa	1,382	1,151	231	28.7	31.8	19.2
Pensacola	550	368	182	23.7	27.5	18.6
Key West.....	453	346	107	24.5	25.4	21.8
Miami	349	212	137	22.4	21.4	24.0

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Births White	Negro	Rate per 1,000 Population Total	White	Negro
Total.....	1,074	829	245	20.9	25.1	13.2
West Tampa.....	330	301	29	42.3	43.6	29.0
Lakeland	96	78	18	13.2	16.6	7.2
St. Petersburg.....	135	91	44	18.7	18.6	19.1
Gainesville	130	88	42	19.4	24.4	13.5
Orlando	97	74	23	15.2	18.0	9.6
St. Augustine.....	97	72	25	17.6	18.9	15.6
Ocala	91	62	29	16.9	23.0	10.7
Tallahassee	98	63	35	18.8	27.4	12.1

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Births White	Negro	Rate per 1,000 Population Total	White	Negro
Total.....	904	593	311	17.3	20.8	13.0
Sanford	118	45	73	23.6	18.0	29.2
Palatka	104	58	46	22.0	27.6	18.4
Daytona	67	37	30	15.6	18.5	12.0
Kissimmee	54	51	3	12.9	15.9	3.0
West Palm Beach.....	52	46	6	12.7	20.0	3.3
DeLand	54	42	12	15.4	20.0	8.6
Quincy	37	34	3	10.7	30.9	1.3
Lake City.....	38	25	13	11.2	13.9	8.1
Bartow	71	50	21	20.9	25.0	15.1
Apalachicola	81	46	35	23.8	27.1	20.6
Bradentown (9).....	40	35	5	12.1	15.2	5.0
Fort Myers.....	70	58	12	21.9	26.4	12.0
Plant City.....	69	58	11	21.6	27.6	10.0
Fernandina	49	8	41	15.8	6.6	20.5

*The term "All Municipalities" does not include all of the 193 municipalities of the State, but only the 128 municipalities which reported births and deaths during the year 1915.

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Number of Births			Rate per 1,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	713	611	102	15.3	18.5	7.6
Marianna.....	26	22	4	10.8	18.3	3.3
Fort Meade.....	47	39	8	21.4	26.0	13.3
DeFuniak Springs.....	30	20	10	14.3	14.4	14.2
St. Cloud.....	29	29	..	13.8	13.8	....
Panama City.....	20	19	1	10.0	12.7	1.7
Dade City (12).....	6	6	..	3.0	4.6	....
Fort Pierce.....	35	24	11	18.4	18.5	18.3
Clearwater (6).....	16	16	..	8.4	13.3	....
Tarpon Springs.....	51	42	9	26.8	30.0	18.0
Fort Lauderdale.....	56	41	15	29.5	31.5	25.0
Wauchula (7).....	45	45	..	25.0	25.0	....
Sarasota.....	71	57	14	41.8	47.5	28.0
Jasper (5).....	21	18	3	13.1	20.0	4.3
Chipley (7).....	13	13	..	8.1	13.0	....
East Millville (7).....	20	19	1	13.3	17.3	2.5
South Jacksonville.....	35	34	1	23.3	26.2	5.0
Manatee (3).....	7	4	3	4.7	5.7	3.7
Zephyrhills (5).....	3	3	..	2.0	2.1	....
Milton (8).....	24	24	..	17.1	26.7	....
St. Andrews.....	30	26	4	21.4	26.0	10.0
Leesburg (3).....	1	3	..	2.1	3.3	....
Titusville (14).....	1	1	..	.8	1.3	....
Lynn Haven.....	15	14	1	11.5	11.6	10.0
Starke (11).....	33	32	1	27.5	32.0	5.0
Winter Haven (4).....	19	19	..	15.8	17.3	....
Eustis.....	15	10	5	13.6	14.3	12.5
Port Tampa City.....	30	21	9	27.3	35.0	18.0
Newberry.....	11	9	2	11.0	22.5	3.3
Pablo Beach.....	1	1	..	1.0	1.4	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Number of Births			Rate per 1,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	331	259	72	22.5	24.9	16.7
Okeechobee (5).....	20	19	1	20.0	21.1	10.0
Carrabelle (7).....	17	13	4	17.0	19.6	13.3
Fellsmere (7).....	16	16	..	17.8	22.9	....
Ormond (10).....	12	9	3	13.3	22.5	7.5
Delray (6).....	27	17	10	33.7	42.5	25.0
Lake Butler.....	16	16	..	20.0	26.7	....
Noma.....	24	23	1	30.0	38.3	5.0
Crescent City.....	16	12	4	20.0	24.0	13.3
Winter Park (1).....	5	4	1	6.3	10.0	2.5
Lake Helen.....	20	7	13	25.0	23.3	26.0
Lake Worth.....	24	24	..	40.0	40.0	....
Stuart.....	13	13	..	21.7	26.0	....
Apopka (6).....	3	2	1	5.0	6.7	3.3
Daytona Beach (3).....	3	3	..	5.0	6.0	....
Mount Dora.....	14	7	7	23.3	17.5	35.0
Largo (8).....	11	11	..	18.3	22.0	....
Eau Gallie (4).....	3	3	..	6.0	6.0	....
Lawtey.....	65	41	24	122.2	137.1	103.0
Umatilla (4).....	3	3	..	6.0	6.0	....
Dania (6).....	5	4	1	10.0	13.3	5.0
Auburndale.....	14	12	2	28.0	30.0	20.0

MUNICIPALITIES LESS THAN 500 POPULATION

	Number of Births			Rate per 1,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	181	149	32	19.1	21.3	12.8
Center Hill (6).....	14	9	5	28.0	22.5	50.0
Pompano (5).....	5	4	1	10.2	15.3	4.3
Callahan.....	8	7	1	16.7	20.0	7.1
Tavares (8).....	6	3	3	13.3	8.1	37.5
Dunedin.....	5	5	..	11.6	13.9	....
Avon Park.....	7	7	..	16.7	17.9	....
Branford (7).....	6	5	1	14.6	22.7	5.3
Melbourne (11).....	10	8	2	24.4	20.0	500.0
Citra.....	7	5	2	17.5	22.7	10.5
Sebring.....	10	10	..	25.0	27.8	....
Cottondale (6).....	5	4	1	12.8	16.7	6.7
Coleman (6).....	8	4	4	20.5	16.0	28.6
Florida City (6).....	10	9	1	27.0	29.0	16.6
Maccleenny (5).....	1	1	..	2.7	3.3	....
Interlachen (6).....	..	..	..	....	....	....
Zolfo (7).....	10	7	3	28.6	25.0	42.9
Bushnell (6).....	14	13	1	41.2	48.1	14.3
Wellborn (6).....	1	1	..	2.9	3.8	....
Laurel Hill (6).....	2	2	..	6.6	6.9	....
Greensboro (6).....	10	10	..	33.3	43.5	....
Ponce de Leon (7).....	4	3	1	13.3	12.5	16.7
Cypress.....	15	15	..	51.7	71.4	....
Pinellas Park (8).....	3	3	..	13.6	16.7	....
Taft (6).....	8	4	4	36.4	44.4	30.8
Reddick (5).....	1	1	..	5.3	7.7	....
Bellevue (7).....	2	2	..	11.1	11.1	....
Eatonville (5).....	2	..	2	16.6	....	16.6
Glendale (5).....	7	7	..	70.0	70.0	....

- 1 December report only
- 2 November and December
- 3 October-December
- 4 September-December
- 5 August-December
- 6 July-December
- 7 June-December
- 8 May-December
- 9 April-December
- 10 March-December
- 11 February-December
- 12 January, February and March only
- 13 July-October.
- 14 July-September.

Deaths

ALL CAUSES

A report of 5,223 deaths was received exclusive of stillbirths from the 128 municipalities for the year 1915, making a death rate of 15.0 per thousand population. Of these 2,839 were white, making a rate of 13.1 and 2,384 were colored making a rate of 18.0. The cities having a population of 10,000 or over show a total death rate of 17.7. This rate was higher than that for any other population group and is doubtless due to more complete registration of deaths in these cities. The white death rate was 14.6 and the colored 23.4. Jacksonville showed the highest death rate in this group which was 20.2, white 17.7 and colored 22.8. The lowest was that of 15.5 for Tampa and Key West. The white death rate in Tampa was slightly lower than that of Key West. The highest death rate in any municipality having a population of 1,000 or more was that of 24.7 for South Jacksonville and was closely followed by Orlando, 23.6 and St. Cloud 23.3. The particularly low death rates in municipalities having populations of less than 5,000 are in many instances accounted for by the facts that reports were not made for the entire year. The foot note with figures opposite the name of the municipality in the tables showing the total number of births and deaths will assist in ascertaining the period covered by such reports for each municipality.

FLORIDA DEATH RATES PER 100,000 POPULATION, 1915 AS COMPARED WITH THOSE OF THE REGISTRATION AREA AND THE SOUTHERN STATES INCLUDED THEREIN FOR 1914

International Title Number	Cause of Death	Florida	U. S. Registration Area	Kentucky	North Carolina*	Virginia
	All causes.....	1,500.0	1,360.9	1,291.5	1,898.4	1,400.8
1	Typhoid fever.....	29.0	15.4	41.7	56.5	27.3
4	Malaria	17.2	2.2	7.0	21.8	7.9
5	Smallpox .....	...	0.3	0.8	2.1	0.8
6	Measles	2.6	6.8	11.5	10.8	5.4
7	Scarlet fever.....	...	6.6	2.6	0.6	1.8
8	Whooping cough.....	4.6	10.3	14.8	16.5	31.6
9	Diphtheria and croup..	14.9	17.9	21.9	18.0	15.8
10	Influenza	22.1	9.1	14.7	18.6	12.1
26	Pellagra	41.1	2.3	6.3	52.5	11.6
28-29	Pulmonary tubercu- losis	153.7	123.1	178.0	211.9	156.7
30-35	Other forms of tubercu- losis	14.4	23.7	29.8	33.9	25.4
37	Syphilis	18.7	7.9	6.0	12.5	10.5
39-45	Cancer and other malignant tumors..	55.2	79.4	46.0	57.8	48.9
79	Organic disease of the heart.....	95.4	141.8	85.5	133.0	123.3
91	Broncho-pneumonia	21.3	48.7	31.7	49.1	29.9
92	Pneumonia	52.9	78.3	76.7	101.0	76.1
104	Diarrhoea and enteritis (under 2 years)....	63.5	66.0	47.7	134.0	58.5
120	Bright's disease.....	107.7	93.4	72.5	105.9	88.3
134-141	The puerperal state....	26.4	15.9	15.1	33.5	22.7
150	Malformations	{ 79.0 }	15.6	8.9	11.4	12.0
151-153	Early infancy		79.6	74.8	113.3	89.6
155-163	Suicides	12.9	16.6	9.9	6.6	7.2
182-184	Homicides	26.1	7.3	13.6	21.2	11.9

*Deaths in municipalities only

TYPHOID FEVER

Typhoid fever was responsible for 101 deaths in the municipalities which made reports of deaths for the year 1915. This number of deaths gives a death rate of 29.0 per 100,000 population. This rate is almost twice that of 15.4 for the United States Registration Area for the year 1914. Of the total number of deaths from typhoid fever, 61 occurred among whites and 40 among the colored, making the respective death rates of 28.2 and 30.3.

The highest death rate for any specific group of municipalities was that of 42.1 for municipalities having a population of less than 500. The next highest rate was that of 40.8 in municipalities of 500 to 1,000 population. The lowest death rate of 19.4 occurred in municipalities of 1,000 to 2,500 population.

Of the 101 typhoid fever deaths, nearly half of them (48) occurred in municipalities having a population of 10,000 or more. The death rate for this group of cities was 27.9. The white rate of 29.8 exceeded the colored rate of 24.9. Of this group of cities, Key West with a death rate of 48.6 was the highest. However, the white death rate of 29.4 was slightly lower than the white death rate for this group of cities. The colored death rate of 102.0 was more than four times that of the total colored death rate for this group. The next highest death rate from typhoid fever occurred in Miami, the rate being 38.5 with white and colored death rates respectively of 40.4 and 35.1. Jacksonville showed the lowest death rate among the cities in this group, the rate being 20.9 with a white rate of 29.2, which was more than twice the colored rate of 13.9.

In municipalities having a population of 5,000 to 10,000 there were 19 deaths from this cause reported. Of this number 9 were white and 10 colored. The typhoid fever death rate for this group was 36.9 with respective white and colored rates of 27.3 and 54.1. The highest death rate in this group of municipalities was that of 69.4 for St. Petersburg, followed closely by Ocala with a rate of 55.6 and West Tampa, 51.3. The lowest death rates in this group of municipalities were: Orlando 15.6, St. Augustine 18.2 and Tallahassee 19.2. No white deaths from typhoid fever were reported from Gainesville, St. Augustine, Ocala or Tallahassee. The highest death rate among whites occurred in St. Petersburg, 61.2 and West Tampa 58.0. No colored deaths from typhoid fever were reported from West Tampa or Orlando. The highest typhoid fever death rates among colored were: Ocala 111.1, St. Petersburg 87.0, Gainesville 64.5 and St. Augustine 62.5.

The group of municipalities having a population of 2,500 to 5,000 reported 15 deaths as due to typhoid fever, making a rate of 28.7 per 100,000 population. Of these there were 7 white with a rate of 24.5 and 8 colored with a rate of 33.3. The municipalities in this group having a death rate higher than that for the group are as follows: DeLand 85.7, Plant City 62.5, Bradentown 60.6, Quincy 57.1, Sanford 40.0, Fernandina 32.3 and Lake City 29.4. No deaths from typhoid fever among whites were reported from Sanford, Lake City, Bradentown or Fernandina. The white typhoid fever death rates were:

Quincy 181.8, DeLand 95.2, Palatka and Plant City 47.6 and Kissimmee 31.3. Typhoid fever deaths among the colored in this group of municipalities occurred in the following order: Bradentown 200.00, Plant City 90.9, Sanford 80.0, DeLand 71.4, Lake City 62.5 and Fernandina 50.0.

MALARIA

During the year 1915 the 128 municipalities reporting deaths made a report of 60 deaths from malaria. This is an average of less than half a death to each of the municipalities making reports. The malaria death rate for all municipalities was 17.2 as compared with a rate of 2.2 for the United States Registration Area for the year 1914. It must be understood, however, that Kentucky, North Carolina and Virginia are the only Southern States included in the Registration Area referred to. Of the total number of malaria deaths, 26 were white and 34 colored, making respective death rates of 12.0 and 25.7. The highest malaria death rate for any group of municipalities was that of 31.6 for municipalities having a population of less than 500. The lowest rates for groups of municipalities were 13.3 for cities having a population of over 10,000 and 13.6 for those having a population of 500 to 1,000.

Among the cities having a population of 10,000 or more, Key West with a rate of 5.4 was the lowest, closely followed by Jacksonville with a rate of 6.0. The highest malaria death rates among cities of this group were Miami 38.5 and Pensacola 25.9. No malaria deaths were reported among whites for either Pensacola or Key West.

Of the municipalities in the group having 5,000 to 10,000 population, the rate of 17.2 for all municipalities was exceeded by the following: Orlando 62.5, Ocala 55.6, Lakeland 54.8, Tallahassee 19.2 and St. Augustine 18.2. No malaria deaths were reported among whites from St. Augustine and no reports were made of malaria deaths among the colored of West Tampa, St. Petersburg or Tallahassee.

The total malaria death rate of 15.3 for municipalities having a population of 2,500 to 5,000 was slightly lower than that for all municipalities. The death rates of municipalities in this group were as follows: Quincy 85.7, Fernandina 32.3, Ft. Myers 31.3, Lake City and Apalachicola 29.4 and Palatka 21.7. No malaria deaths among whites were reported from Palatka, Lake City, Fort Myers or Fernandina. No colored deaths were reported from malaria from Apalachicola.

SMALLPOX

Smallpox was not reported as a cause of death during the year.

MEASLES

Measles was responsible for only 9 deaths in the 128 municipalities making reports for the year 1915. This makes a state death rate of 2.6. All of these deaths occurred among whites, making a white death rate of 4.2, as compared with a rate of 6.8 for the United States Registration Area for the year 1914.

All of these deaths occurred in the city of Tampa making a rate of 18.7 and a white rate of 24.9 for that city.

SCARLET FEVER

No deaths were reported from scarlet fever for the year 1915. The State was practically free from this disease throughout the year. The State Board of Health had knowledge of only three cases, none of which resulted in death.

WHOOPIING COUGH

The mortality from whooping cough in municipalities making report of deaths for 1915 was very low. Only 16 deaths were reported from this cause with a rate of 4.6 per 100,000 population which was less than half the rate of 10.3 for the United States Registration Area for the year 1914. Of these deaths 10 occurred among whites and 6 among the colored, making respective death rates of 4.6 and 4.5. No deaths from whooping cough were reported from municipalities having a population of 5,000 to 10,000 and no deaths were reported in municipalities having a population of less than 2,500.

The cities having a population of over 10,000 reported 11 of the 16 deaths. The whooping cough death rate for this group was 6.4, white 7.7 and colored 4.4. Jacksonville reported more than half the deaths reported from whooping cough in this group, showing a death rate of 9.0, which was the highest death rate for any of the cities. Pensacola was next with a rate of 8.6. The death rate for Miami was 6.4 and Tampa 4.1. Key West reported no deaths from whooping cough. The highest death rates among whites in this group were those of Pensacola, 14.9, Jacksonville 13.0 and Miami 10.1. The lowest white rate was 2.8 for Tampa. No deaths from whooping cough were reported among the colored from Pensacola or Miami. The whooping cough death rate among the colored for Tampa was 8.3, and Jacksonville 5.5.

Whooping cough caused 5 deaths in municipalities having a population of 2,500 to 5,000, making a death rate of 9.6 per 100,000 population, a white rate of 7.0 and a colored rate of 12.5. Fort Myers with three deaths showed a rate of 93.8, Daytona and Lake City with one death each had respective death rates for whooping cough of 22.2 and 29.4. No deaths among whites from whooping cough were reported from Lake City and no colored deaths from this disease were reported from Daytona.

DIPHTHERIA AND CROUP

Diphtheria and croup were reported as the cause of 52 deaths in the municipalities of Florida during 1915, making a death rate of 14.9 per 100,000 population which is slightly lower than that of 17.9 for the United States Registration Area for the preceding year. Of the total deaths from this cause, there were 39 among the whites and 13 among the colored. The death rates among whites from this cause was 18.1 and the colored 9.8.

Approximately one-half (25) of the diphtheria deaths occurred in municipalities having a population of 10,000 and over, making a death rate of 14.5 for this group of cities. The death rate among the whites was 16.3 and among the colored 11.7. The highest death rate in this group of cities from diphtheria was that of Jacksonville 25.4, the next

highest being Tampa 12.4. No deaths from this cause were reported from Key West. Miami and Pensacola with one death each show respective death rates of 6.4 and 4.3. Among whites the death rates for this group of cities were as follows: Jacksonville 29.2, Tampa 16.6, Miami 10.1 and Pensacola 7.5. No deaths among colored were reported from Miami, Pensacola or Tampa. The colored death rate for Jacksonville was 22.2.

During the year 1915 diphtheria was not reported as a cause of death in Ocala, Orlando, St. Petersburg or Tallahassee of the municipalities having a population of 5,000 to 10,000. There were 5 deaths from this cause in this group, making a death rate of 9.7 per 100,000 population. The death rates for municipalities in this group are as follows: West Tampa 25.6, St. Augustine 18.2, Gainesville 14.9 and Lakeland 13.7. No deaths from diphtheria among whites were reported from Gainesville or St. Augustine. No deaths among the colored from Lakeland or West Tampa.

The municipalities having a population of 2,500 to 5,000 reported 5 deaths from diphtheria, making a death rate of 9.6. The following death rates are shown for municipalities in this group in which deaths from this cause were reported: Fort Myers 31.3, Bartow 29.4, Kissimmee 23.8 and Palatka 21.7. No deaths from this cause were reported among the colored from Bartow, Kissimmee or Palatka.

Of the 52 deaths reported as being due to diphtheria and croup, 17 occurred in municipalities having a population of less than 2,500. The number of deaths reported from each of these municipalities were as follows: East Millville 5, DeFuniak Springs 3, Fort Meade 2 and one each from Tarpon Springs, Manatee, Leesburg, Pablo Beach, Okeechobee, Apopka and Laurel Hill.

INFLUENZA

(La Grippe)

Influenza was responsible for 77 deaths in the municipalities of Florida during the year 1915, making a death rate of 22.1 per 100,000 population. This death rate was more than twice that of 9.1 shown for the preceding year in the United States Registration Area. During the year 1915 influenza was pandemic in the United States and more deaths were caused from this disease in 1915 than during any of the recent years. The deaths from influenza in the Florida municipalities were not confined to any geographical section, but were generally distributed. There were 56 white deaths and 21 colored, making respective death rates of 25.9 and 15.9 per 100,000 population.

Among the 13 municipalities having a population of over 5,000, Key West was the only city which did not report a death from influenza. The highest death rate for any group of municipalities was that of 36.9 for those having a population of 5,000 to 10,000.

PELLAGRA

Pellagra was reported as the cause of 143 deaths in the municipalities of Florida during the year 1915. This number of deaths would make a death rate of 41.1 per 100,000 population as compared with a rate of 2.3 for the United States Registration Area for the year 1914. Pellagra caused more than one-fourth as many deaths as pulmonary

tuberculosis; nearly one and one-half times as many deaths as typhoid fever; more than twice as many deaths as malaria and more than typhoid fever, measles and whooping cough combined. Of the 143 deaths caused by pellagra, 41 occurred among whites and 102 among the colored, making a white rate of 19.0 and a colored rate of 77.2 which was 4 times as high as the white rate.

The highest death rate for any group of municipalities was that of 53.4 for those having a population of 10,000 or over. The next highest rate, 40.2 was for municipalities having a population of 2,500 to 5,000. In municipalities having a population of 5,000 to 10,000 the rate was 35.0.

In municipalities having a population of over 5,000, Key West was the only city which did not report a death from pellagra.

In municipalities having a population of 2,500 or over there were no deaths reported among whites from Gainesville, Ocala, Tallahassee, Palatka, Apalachicola, Bradentown or Fernandina, and no deaths from this disease among the colored from Lakeland, St. Petersburg, DeLand or Bartow.

TUBERCULOSIS

All forms of tuberculosis was reported as the cause of 585 deaths in the municipalities of Florida during the year 1915, making a death rate of 168.1. This disease was responsible for 11.2 per cent of all deaths reported. Of the total number of deaths from all forms of tuberculosis, 535 or 92 per cent were due to pulmonary tuberculosis (consumption). The death rate per 100,000 population for all forms of tuberculosis was 146.8 for the United States Registration Area during the year 1914. The death rate for pulmonary tuberculosis in that area was 123.1 as compared with a rate of 153.7 for Florida municipalities.

The death rate for the United States Registration Area is somewhat lower than that for the municipalities of Florida but the distribution of the population in that area by color or race is much different from that of the municipalities of Florida. The United States Registration Area covers a section of the country in which only 8 per cent of its total population is colored, whereas the municipalities of Florida have nearly five times (37.8 per cent) as many colored.

The Florida death rate among whites for all forms of tuberculosis was 102.8—which is much lower than that of the Registration Area—as compared with a colored rate of 274.8. The highest death rates for municipalities having a population of 5,000 and over were as follows: Ocala 277.8, West Tampa 266.7, Orlando 265.6, Jacksonville 242.2, St. Augustine 236.4 and Pensacola 228.4.

The highest death rates for all forms of tuberculosis among whites in municipalities having a population of 5,000 and over were as follows: Orlando 219.5, St. Augustine 184.2, Key West 183.8, St. Petersburg 183.7 and West Tampa 173.9. Those showing extremely low white death rates were: Ocala 37.0, Tallahassee 43.5 and Gainesville 55.6.

The highest death rate from all forms of tuberculosis among the colored in municipalities of this group were as follows: Ocala 518.5,

Tampa 425.0, Pensacola 387.8, St. Augustine 375.0, Jacksonville 341.8 and Orlando 333.3 per 100,000 population. Tallahassee with a death rate of 34.5 and West Tampa with a rate of 100.0 per 100,000 population were the lowest.

SYPHILIS

During the year 1915 syphilis was the cause of 65 deaths. Of this number 15 were white and 50 colored. The syphilis death rate for municipalities of Florida was 18.7 per 100,000 population as compared with a rate of 7.9 for the United States Registration Area for the year 1914. The 15 deaths among whites were responsible for a death rate of 6.9 which was lower than that for the Registration Area, and the 50 colored deaths made a death rate of 37.9 which was nearly five times that of the Registration Area. Syphilis caused more deaths than either malaria or diphtheria and more deaths than diphtheria and measles combined.

Syphilis was reported as the cause of 38 deaths in cities having a population of over 10,000 which was more than half of the deaths reported from this cause. The syphilis death rate for this group was 22.1 per 100,000 population, with a white rate of 9.6 and colored of 41.0. No deaths from syphilis were reported from Pensacola. In this group of cities, Jacksonville with a rate of 41.9 was the highest, followed by Miami with a death rate of 19.2, Key West 10.8 and Tampa 10.4. Among whites Key West showed the highest rate of 14.7, followed by Jacksonville with a rate of 13.0, Miami 10.0 and Tampa 8.3. No colored deaths from syphilis were reported from Key West. The syphilis death rates among the colored for this group of cities were: Jacksonville 66.5, Miami 35.1 and Tampa 16.7.

The death rate in municipalities having a population of 5,000 to 10,000 was 19.4, white rate 3.0 and colored 48.6 per 100,000 population. Orlando with a rate of 46.9 was the highest followed by Gainesville 29.9. No syphilis deaths were reported among whites in West Tampa, St. Petersburg, Gainesville, Orlando, St. Augustine or Ocala. The high syphilis death rate for Orlando was due to the deaths among the colored. The colored rate for that city being 125.0 with West Tampa next highest with a rate of 100.0. No syphilis deaths were reported among the colored in Tallahassee.

The syphilis death rate for municipalities having a population of 2,500 to 5,000 was 19.1 per 100,000 population. Those having a population of 1,000 to 2,500 had a death rate of 12.9. No deaths from this cause were reported by municipalities having a population of 500 to 1,000. In municipalities having a population of less than 500, the group death rate was 10.5.

CANCER

Cancer and other malignant tumors was reported as the cause of 192 deaths in the municipalities of Florida during the year 1915. Of these 143 occurred among the whites and 49 among the colored. The cancer death rate for Florida was 55.2 as compared with 79.4 for the United States Registration Area of 1914. Cancer deaths among whites and colored respectively were 66.2 and 37.1 per 100,000 population.

Among the 13 municipalities having a population of over 5,000, Orlando was highest with a rate of 125.0 and Miami next with a rate of 102.6. The death rate for cities having a population of over 10,000 were as follows: Key West 97.3, Tampa 78.8, Pensacola 60.3 and Jacksonville 50.8.

The cancer death rate per 100,000 population for municipalities having a population of 5,000 to 10,000 exclusive of Orlando were: Ocala 95.6, St. Petersburg 83.3, Gainesville 59.7, West Tampa 51.3, Lakeland 41.1, Tallahassee 38.5 and St. Augustine 36.4. The death rates for other groups of municipalities were as follows: 2,500 to 5,000, 38.2; 1,000 to 2,500, 28.0; 500 to 1,000, 13.6 and for municipalities of less than 500 population 31.6.

HEART DISEASE

Heart disease was responsible for 332 deaths in the municipalities of Florida during the year 1915, making a death rate of 95.4 per 100,000 population. This rate is decidedly lower than that of 141.8 for the United States Registration Area for 1914. Of the 332 deaths, 201 occurred among whites and 131 among colored, making respective death rates of 93.1 and 99.2.

PNEUMONIA

The term pneumonia as used includes lobar pneumonia, broncho pneumonia and pneumonia unqualified, which are classified under International Titles 91 and 92.

Pneumonia was responsible for 258 deaths in the municipalities of Florida during the year 1915 with a rate of 74.2 per 100,000 population as compared with a rate of 127.0 for the United States Registration Area for the year 1914.

Of this number of deaths 184 were due to lobar pneumonia and 74 were due to broncho pneumonia. The combined rate for all pneumonia among the whites was 68.0 and among the colored 84.1.

In municipalities having a population of 10,000 and over the highest death rate was 124.0 for Jacksonville and the lowest was Miami 64.1. The rates of other cities in this group were as follows: Key West 97.3, Pensacola 90.5 and Tampa 89.2. The colored death rate exceeded that of the white in each city except Tampa.

Of the 8 municipalities having a population of 5,000 to 10,000 the highest death rates per 100,000 population from pneumonia were Orlando 155.1, Gainesville 134.3 and the lowest were St. Augustine 36.4, Ocala 37.0 and Lakeland 54.8. The death rates for the other cities included in this group were St. Petersburg 83.3 and Tallahassee and West Tampa 76.9.

DIARRHOEA AND ENTERITIS

(Under 2 years)

Diarrhoea and enteritis caused 221 deaths in the municipalities of Florida during the year 1915 among children under 2 years of age. The death rate was 63.5 per 100,000 population as compared with a rate of 66.0 for the United States Registration Area for 1914. There were 137 white deaths and 84 colored deaths reported, making respective death rates of 63.4 and 63.6.

Of the cities having a population of 10,000 and over, Key West with 24 deaths showing a rate of 129.7 per 100,000 population was the highest. This was the highest rate for any city of over 5,000 population with the exception of West Tampa with a rate of 205.1. Of the four other largest cities the highest death rates were as follows: Tampa 103.7 and Miami 102.6. The lowest rate in this group was Jacksonville 52.3.

Among the whites in the five largest cities, the highest death rate for diarrhoea and enteritis was that of Tampa 127.1 and the lowest rates, Jacksonville 42.2 and Miami 40.4. Among the colored in these cities the two cities showing the highest rates were Key West 265.3 and Miami 210.5. The lowest rate was Tampa 33.3. The death rate among the colored for Pensacola and Jacksonville were respectively 81.6 and 60.9.

Of the 8 municipalities having a population of 5,000 to 10,000 the highest death rate of 205.1 for West Tampa was practically the same as the white and colored with respective rates of 202.9 and 206.2, whereas, the high rate in Key West was due to the colored deaths. The next highest rates were those of St. Petersburg 83.3 and Lakeland 82.2. The lowest death rates from diarrhoea and enteritis in children under two years of age in this group of municipalities were as follows: St. Augustine 18.2, Ocala 18.5 and Tallahassee 19.2. No deaths among white children were reported from St. Augustine or Ocala and no deaths among the colored were reported from Gainesville or Tallahassee.

CHRONIC NEPHRITIS

(Bright's Disease)

Chronic nephritis was responsible for 375 deaths in the municipalities of Florida during the year 1915. Of this number 232 were white and 143 colored. The death rate from this cause was 107.7 per 100,000 population as compared with a death rate of 93.4 for the United States Registration Area for the year 1914. The white rate was 107.4 and the colored 108.3.

In cities having a population of 10,000 and over the death rate was 138.7. The cities in this group showing the highest death rates were Jacksonville 192.8 and Key West 178.4. The other cities in this group, Miami, Tampa and Pensacola show respective death rates of 96.2, 87.1 and 86.2 per 100,000 population.

In municipalities having a population of 5,000 to 10,000 the highest death rates were as follows: Ocala 240.7, Orlando 187.5 and Lakeland 178.1. The lowest rate was that of West Tampa 51.3.

THE PUERPERAL STATE

The puerperal state, which includes International Titles Nos. 134 to 141 inclusive, includes all deaths due to accidents of pregnancy or labor, puerperal haemorrhage, puerperal septicaemia, puerperal eclampsia, phlegmasia alba dolens, embolus and diseases of the breast following the puerperal state.

The puerperal state was responsible for the death of 92 women, making a death rate from this cause of 26.4 per 100,000 population. Of this number of deaths 51 were white and 41 were colored, making a white rate of 23.6 and a colored rate of 31.0. All of these rates are higher than that of 15.9 for the United States Registration Area for the year 1914.

Among the cities having a population of 10,000 and over, the lowest death rate was Key West, 10.8 and the highest Pensacola, 34.5. Among the whites in these cities the highest death rates were Jacksonville 32.1, Miami 30.3 and Pensacola 29.9. No deaths among the colored were reported from Key West or Miami.

Among the eight cities included in the group of municipalities having a population of 5,000 to 10,000 the highest rates were: Orlando 62.5, Gainesville 44.8 and St. Petersburg 27.8. The lowest was that of West Tampa 12.8. No white deaths from this cause were reported from Ocala and no colored deaths from St. Petersburg or St. Augustine. No deaths from the puerperal were reported from Lakeland or Tallahassee.

INFANT MORTALITY

(Deaths Under 1 Year of Age)

Of the 5,223 deaths reported by Florida municipalities for the year 1915, 682 occurred in children under 1 year of age, representing 13.1 per cent of the total number of deaths. Of the 682 deaths, 275 were caused by malformations, premature births, congenital debility and other causes peculiar to early infancy. Of the remaining number, 230 were caused by communicable diseases which were by color or race as follows: Typhoid fever, white 1, colored 2; malaria, white 2, colored 1; measles, white 2; whooping cough, white 6, colored 3; diphtheria, white 1, colored 2; influenza, white 1, colored 2; all forms of tuberculosis, white 1, colored 2; syphilis, white 2, colored 6; broncho pneumonia, white 17, colored 8; lobar pneumonia, white 15, colored 19; diarrhoea and enteritis, white 78, colored 59.

One death from pellagra and two from homicide were reported among colored children under 1 year of age.

SUICIDE

Suicide was reported as the cause of 45 deaths in municipalities of Florida during 1915. Of these 37 were white and 8 were colored. The total death rate for this cause was 12.9, white rate 17.1 and colored rate 6.1. The death rate for suicide for the Registration Area of the United States for the year 1914 was 16.6. The white rate for the Florida municipalities was only slightly higher than this rate and the negro rate was decidedly lower.

Only one suicide was reported from municipalities having a population of less than 5,000. In municipalities having a population of over 5,000 the highest rates were as follows: Miami 44.9, Tampa 31.1, St. Petersburg 27.7 and West Tampa 25.6. The lowest rate was that of Pensacola, 8.6 per 100,000 population.

HOMICIDES

Homicides was responsible for 91 deaths in the municipalities of Florida during the year 1915. Of this number 19 were white and 72 colored. The homicide death rate for these municipalities was 26.1 per 100,000 population. This was more than three times that of 7.3 for the United States Registration Area for the year 1914. The white rate of 8.8 was but slightly higher than that of the Registration Area, while the colored rate of 54.5 was more than seven times the rate for the Registration Area, and nearly seven times that of the white rate for the Florida municipalities,—the high negro rate being responsible for the high homicide rate for Florida municipalities.

The cities having a population of 10,000 and over that show the highest death rates from this cause were Jacksonville 55.3 and Miami 44.9. The lowest rates were Key West 5.4 and Pensacola 8.6. No white deaths were reported from Pensacola and no colored deaths from Key West from this cause.

In the municipalities having a population of 2,500 to 10,000 no white deaths were reported as due to homicide. The highest rates in this group were: Sanford 80.0, St. Augustine 54.5 and Ocala 37.0, the lowest that of Tallahassee 19.2.

Municipalities having a population of 1,000 to 2,500 reported 8 homicides which were as follows: Fort Pierce and Tarpon Springs 2 each, Fort Meade, Dade City, Eustis and Port Tampa City 1 each.

Municipalities having a population of less than 1,000 reported 8 deaths from homicide.

DEATHS, ALL CAUSES

(Stillbirths Excluded)

	Total	Total Deaths		Rate per 1,000 Population	Total	White		Negro
		White	Negro			White	Negro	
All Municipalities*	5,223	2,839	2,384	15.0	13.1	18.0		

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 1,000 Population	Total	White		Negro
		White	Negro			White	Negro	
Total	3,054	1,523	1,531	17.7	14.6	22.4		
Jacksonville	1,354	532	822	20.2	17.7	22.8		
Tampa	746	498	248	15.5	13.8	20.7		
Pensacola	424	182	242	18.3	13.6	24.7		
Key West	286	195	91	15.5	14.3	18.6		
Miami	244	116	128	15.6	11.7	22.5		

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 1,000 Population	Total	White		Negro
		White	Negro			White	Negro	
Total	893	541	352	17.3	16.4	19.0		
West Tampa	108	88	20	13.8	12.8	20.0		
Lakeland	107	79	28	14.7	16.5	11.2		
St. Petersburg	148	112	36	20.6	22.9	15.7		
Gainesville	102	42	60	15.2	11.7	19.4		
Orlando	151	100	51	23.6	24.4	21.3		
St. Augustine	101	56	45	18.4	14.7	28.1		
Ocala	112	37	75	20.7	13.7	27.8		
Tallahassee	64	27	37	12.3	11.7	12.8		

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 1,000 Population	Total	White		Negro
		White	Negro			White	Negro	
Total	568	295	273	10.8	10.3	11.4		
Sanford	45	26	19	9.0	10.4	7.6		
Palatka	82	38	44	17.8	18.1	17.6		
Daytona	38	23	15	8.4	11.5	6.0		
Kissimmee	23	19	4	5.4	5.9	4.9		
West Palm Beach	27	20	7	6.5	8.7	3.9		
DeLand	43	26	19	12.9	12.4	13.6		
Quincy	26	12	14	7.4	10.9	6.1		
Lake City	36	18	18	10.6	10.0	11.3		
Bartow	21	16	5	6.2	8.0	3.6		
Apalachicola	61	14	47	17.9	8.2	27.6		
Bradentown (9)	16	12	4	4.8	5.2	4.0		
Fort Myers	51	32	19	15.9	14.5	19.0		
Plant City	50	28	22	15.6	13.3	20.0		
Fernandina	47	11	36	15.2	9.2	18.0		

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 1,000 Population	Total	White		Negro
		White	Negro			White	Negro	
Total	471	308	163	10.1	9.3	12.2		
Marianna	23	6	17	9.6	5.0	4.2		
Fort Meade	24	14	10	10.9	9.3	16.7		
DeFuniak Springs	31	20	11	14.8	14.3	15.7		
St. Cloud	49	49	..	23.3	23.3	..		
Panama City	13	8	5	6.5	5.3	8.3		
Dade City (12)	17	8	9	8.5	6.2	15.0		
Fort Pierce	27	15	12	14.2	11.5	20.0		
Clearwater (6)	8	6	2	4.2	5.0	2.9		
Tarpon Springs	33	16	17	17.4	11.4	34.0		
Fort Lauderdale	15	9	6	7.9	6.9	10.0		
Wauchula (7)	17	14	3	9.4	7.8	60.0		
Sarasota	22	13	9	12.9	10.8	18.0		
Jasper (5)	7	2	5	4.4	2.2	7.1		
Chipley (7)	1	1	..	.6	1.0	..		
East Millville (7)	19	16	3	12.7	14.5	7.5		
South Jacksonville	37	23	14	24.7	17.7	70.0		
Manatee (3)	12	5	7	8.0	7.1	8.8		
Zephyrhills (5)	7	7	..	4.7	5.0	..		
Milton (8)	14	8	6	10.0	8.9	12.0		
St. Andrews	9	8	1	6.4	8.0	2.5		
Leesburg (3)	5	4	1	3.6	4.4	2.0		
Titusville (14)	7	5	2	5.4	6.3	4.0		
Lynn Haven	20	20	..	15.4	16.7	..		
Starke (11)	16	11	5	13.3	11.0	25.0		
Winter Haven (4)	4	4	..	3.3	3.6	..		
Eustis	19	11	8	17.3	15.7	20.0		
Port Tampa City	8	2	6	7.3	3.3	12.0		
Newberry	3	..	3	3.0	..	5.0		
Pablo Beach	4	3	1	4.0	4.3	3.3		

*The term "All Municipalities" does not include all of the 193 municipalities of the State, but only the 128 municipalities which reported births and deaths during the year 1915.

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 1,000 Population		
		White	Negro	Total	White	Negro
Total.....	147	102	45	10.0	9.8	10.5
Okeechobee (5).....	6	6	..	6.0	6.6	....
Carrabelle (7).....	6	2	4	6.0	2.9	13.3
Fellsmere (7).....	6	4	2	6.7	5.7	10.0
Ormond (10).....	9	..	9	10.0	....	22.5
Delray (6).....	8	7	1	10.0	17.5	2.5
Lake Butler.....	5	5	..	6.3	8.3	....
Noma.....	1	1	..	1.3	1.7	....
Crescent City.....	12	8	4	15.0	16.0	13.3
Winter Park (1).....	1	1	..	1.3	2.5	....
Lake Helen.....	8	5	3	10.0	16.7	6.0
Lake Worth.....	9	8	1	15.0	13.3	....
Stuart.....	5	5	..	8.3	10.0	....
Apopka (6).....	4	3	1	6.7	10.0	....
Daytona Beach (3).....	3	3	..	2.0	6.0	....
Mount Dora.....	21	17	4	35.0	42.5	20.0
Largo (8).....	2	2	..	3.3	6.0	....
Eau Gallie (4).....	3	2	1	6.0	4.0	20.0
Lawtey.....	23	15	8	46.0	50.0	40.0
Umatilla (4).....	2	2	..	4.0	4.0	....
Dania (6).....	8	..	6	16.0	6.7	30.0
Auburndale.....	5	4	1	10.0	10.0	10.0

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 1,000 Population		
		White	Negro	Total	White	Negro
Total.....	90	70	20	9.5	10.0	8.0
Center Hill (6).....	6	6	..	12.0	15.0	....
Pompano (5).....	..	..	..	..	..	..
Callahan.....	10	8	2	20.8	22.9	14.3
Tavares (8).....	5	4	1	11.1	10.8	12.5
Dunedin.....	4	1	3	9.3	2.8	42.9
Avon Park.....	10	10	..	23.8	25.6	....
Branford (7).....	1	..	1	2.4	....	5.3
Wellbourne (11).....	1	1	..	2.4	2.5	....
Citra.....	5	5	..	12.5	22.7	....
Sebring.....	6	5	1	15.0	13.9	25.0
Cottondale (6).....	2	1	1	5.1	4.2	6.7
Coleman (6).....	8	5	3	20.5	20.0	21.4
Florida City (6).....	..	..	..	....	....	....
Macclenny (5).....	..	..	..	....	....	....
Interlachen (6).....	2	..	2	5.7	....	10.0
Zolfo (7).....	4	2	2	11.4	7.1	28.5
Bushnell (6).....	6	6	..	17.6	22.2	....
Wellborn (6).....	3	3	..	8.8	11.5	....
Laurel Hill (6).....	2	2	..	6.7	6.9	....
Greensboro (6).....	1	1	..	3.3	4.3	....
Ponce de Leon (7).....	1	1	..	3.3	4.2	....
Cypress.....	..	..	..	....	....	....
Pinellas Park (8).....	4	4	..	18.2	22.2	....
Taft (6).....	6	4	2	27.3	44.4	15.4
Reddick (5).....	1	..	1	5.0	....	14.3
Bellevue (7).....	1	1	..	5.6	5.6	....
Eatonville (5).....	1	..	1	8.3	....	8.3
Glendale (5).....	..	..	..	....	....	....

- (1) December reports only
- (2) November and December
- (3) October-December
- (4) September-December
- (5) August-December
- (6) July-December
- (7) June-December
- (8) May-December
- (9) April-December
- (10) March-December
- (11) February-December
- (12) January, February and March only
- (13) July-October
- (14) July-September

TYPHOID FEVER DEATHS

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	101	61	40	29.0	28.2	30.3

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	48	31	17	27.9	27.3	24.9
Jacksonville.....	14	9	5	20.9	29.2	13.9
Tampa.....	12	10	2	24.9	27.6	16.7
Pensacola.....	7	4	3	30.2	29.9	30.6
Key West.....	9	4	5	48.6	29.4	102.0
Miami.....	6	4	2	38.5	40.4	35.1

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	19	9	10	36.9	27.3	54.1
West Tampa.....	4	4	..	51.3	58.0	....
Lakeland.....	2	1	1	27.4	20.8	40.0
St. Petersburg.....	5	3	2	69.4	61.2	87.0
Gainesville.....	2	..	2	29.9	....	64.5
Orlando.....	1	1	..	15.6	24.4	....
St. Augustine.....	1	..	1	18.2	....	62.5
Ocala.....	3	..	3	55.6	....	111.1
Tallahassee.....	1	..	1	19.2	....	34.5

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	15	7	8	28.7	24.5	33.3
Sanford.....	2	..	2	40.0	....	80.0
Palatka.....	1	1	..	21.7	47.6	....
Kissimmee.....	1	1	..	23.8	31.3	....
DeLand.....	3	2	1	85.7	95.2	71.4
Quincy.....	2	2	..	57.1	181.8	....
Lake City.....	1	..	1	29.4	....	62.5
Bradentown.....	2	..	2	60.6	....	200.0
Plant City.....	2	1	1	62.5	47.6	90.9
Fernandina.....	1	..	1	32.3	....	50.0

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	9	7	2	19.4	21.1	14.9
DeFuniak Springs.....	2	2	..	95.2	142.9	....
St. Cloud.....	1	1	..	47.6	47.6	....
Dade City.....	1	1	..	50.0	76.9	....
Fort Pierce.....	1	1	..	52.6	76.9	....
Tarpon Springs.....	1	1	..	52.6	71.4	....
Fort Lauderdale.....	1	1	..	52.6	76.9	....
Starke.....	1	..	1	83.3	....	500.0
Newberry.....	1	..	1	100.0	....	166.7

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	6	3	3	40.8	28.8	69.8
Ormond.....	3	..	3	....	....	....
Lake Butler.....	2	2	..	....	....	....
Mount Dora.....	1	1	..	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	4	4	..	42.1	57.1	....
Avon Park.....	1	1	..	....	....	....
Sebring.....	1	1	..	....	....	....
Bushnell.....	1	1	..	....	....	....
Greensboro.....	1	1	..	....	....	....

MALARIA DEATHS

All Municipalities.....	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
	60	26	34	17.2	12.0	25.7

MUNICIPALITIES OVER 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	23	10	13	13.3	9.6	19.0
Jacksonville	4	2	2	6.0	6.5	5.5
Tampa	6	4	2	12.4	9.0	16.7
Pensacola	6	..	6	25.9	....	61.2
Key West.....	1	..	1	5.4	....	20.4
Miami	6	4	2	38.5	40.4	35.1

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	15	6	9	29.1	18.2	48.6
West Tampa.....	1	1	..	12.8	14.5	....
Lakeland	4	1	3	54.8	20.8	120.0
St. Petersburg.....	1	1	..	13.9	20.4	....
Orlando	4	1	3	62.5	24.4	125.0
St. Augustine.....	1	..	1	18.2	....	62.5
Ocala	3	1	2	55.6	37.0	74.0
Tallahassee	1	1	..	19.2	43.5	....

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	8	2	6	15.3	7.0	25.0
Palatka	1	..	1	21.7	....	40.0
Quincy	3	1	2	85.7	90.9	87.0
Lake City.....	1	..	1	29.4	....	62.5
Apalachicola	1	1	..	29.4	58.8	....
Fort Myers.....	1	..	1	31.3	....	100.0
Fernandina	1	..	1	32.3	....	50.0

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	9	6	3	19.4	18.1	22.4
Marianna	1	..	1	41.6	....	83.3
Fort Meade.....	1	1	..	45.5	66.7	....
DeFuniak Springs.....	1	1	..	47.6	71.4	....
Panama City.....	1	1	..	50.0	66.7	....
Dade City.....	1	1	..	50.0	76.9	....
Tarpon Springs.....	1	..	1	52.6	....	200.0
Jasper	1	..	1	62.5	....	142.9
Leesburg	1	1	..	71.4	111.1	....
Starke	1	1	..	83.3	100.0	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	2	1	1	13.6	9.6	23.3
Crescent City.....	1	..	1	....	....	....
Dania	1	1	..	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	3	1	2	31.6	14.3	80.0
Center Hill.....	1	1	..	....	....	....
Cottondale	1	..	1	....	....	....
Coleman	1	..	1	....	....	....

MEASLES DEATHS

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	9	9	0	2.6	4.2	....

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	9	9	0	5.2	8.7	....
Tampa	9	9	0	18.7	24.9	....

WHOOPIING COUGH DEATHS

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	16	10	6	4.6	4.6	4.5

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	11	8	3	6.4	7.7	4.4
Jacksonville	6	4	2	9.0	13.0	5.5
Tampa	2	1	1	4.1	2.8	8.3
Pensacola	2	2	..	8.6	14.9	....
Miami	1	1	..	6.4	10.1	....

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	5	2	3	9.6	7.0	12.5
Daytona	1	1	0	22.2	50.0	....
Lake City.....	1	..	1	29.4	....	62.5
Fort Myers.....	3	1	2	93.8	45.5	200.0

DIPHTHERIA AND CROUP

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
All Municipalities.....	52	39	13	14.9	18.1	9.8

MUNICIPALITIES OVER 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	25	17	8	14.5	16.3	11.7
Jacksonville	17	9	8	25.4	29.2	22.2
Tampa	6	6	..	12.4	16.6	....
Pensacola	1	1	..	4.3	7.5	....
Miami	1	1	..	6.4	10.1	....

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	5	3	2	9.7	9.1	10.8
West Tampa.....	2	2	..	25.6	29.0	....
Lakeland	1	1	..	13.7	20.8	....
Gainesville	1	..	1	14.9	....	32.3
St. Augustine.....	1	..	1	18.2	....	62.5

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	5	4	1	9.6	14.0	4.2
Palatka	1	1	..	21.7	47.6	....
Kissimmee	1	1	..	23.8	31.3	....
Bartow	1	1	..	29.4	50.0	....
Fort Myers.....	2	1	1	31.3	45.5	100.0

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	14	12	2	30.1	36.3	14.9
Fort Meade.....	2	2	..	90.9	133.3	....
DeFuniak Springs.....	3	2	1	142.9	142.9	142.9
Tarpon Springs.....	1	1	..	52.6	71.4	....
East Millville.....	5	5	..	333.3	454.5	....
Manatee	1	..	1	66.7	125.0	....
Leesburg	1	1	..	71.4	111.1	....
Pablo Beach.....	1	1	..	100.0	142.9	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	2	2	..	13.6	19.2	....
Okeechobee	1	1	..	....	....	....
Apopka	1	1	..	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	1	1	..	10.5	14.3	....
Laurel Hill.....	1	1	..	....	....	....

INFLUENZA DEATHS

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
All Municipalities.....	77	56	21	22.1	25.9	15.9

MUNICIPALITIES OVER 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	34	20	14	19.7	19.2	20.5
Jacksonville	18	11	7	26.9	35.7	19.4
Tampa	7	4	3	14.5	11.0	25.0
Pensacola	4	3	1	17.2	22.4	10.2
Miami	5	2	3	32.0	20.2	52.6

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	19	17	2	36.9	51.5	10.8
West Tampa.....	1	1	..	12.8	14.5	....
Lakeland	4	4	..	54.8	83.3	....
St. Petersburg.....	3	3	..	41.7	61.2	....
Gainesville	4	4	..	59.7	111.1	....
Orlando	4	3	1	62.5	73.2	41.7
St. Augustine.....	1	..	1	18.2	....	62.5
Ocala	1	1	..	18.5	37.0	....
Tallahassee	1	1	..	19.2	43.5	....

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	8	6	2	15.3	21.0	8.3
Sanford	2	2	..	40.0	80.0	....
Kissimmee	1	1	..	23.8	31.3	....
DeLand	2	1	1	57.1	47.6	71.4
Lake City.....	1	..	1	29.4	....	62.5
Apalachicola	1	1	..	29.4	58.8	....
Plant City.....	1	1	..	31.3	47.6	....

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	11	10	1	23.7	30.2	7.5
Fort Meade.....	1	1	..	45.5	66.7	....
St. Cloud.....	3	3	..	142.9	142.9	....
Dade City.....	2	2	..	100.0	153.8	....
Fort Pierce.....	1	1	..	52.6	76.9	....
Fort Lauderdale.....	1	1	..	52.6	76.9	....
Jasper	1	1	..	62.5	111.1	....
South Jacksonville.....	1	..	1	66.7	....	500.0
Starke	1	1	..	83.3	100.0	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	3	1	2	20.4	9.6	46.5
Ormond	2	..	2	....	....	....
Mount Dora.....	1	1	..	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	2	2	..	21.1	28.6	....
Coleman	1	1	..	....	....	....
Bushnell	1	1	..	....	....	....

PELLAGRA DEATHS

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
All Municipalities.....	143	41	102	41.1	19.0	77.2

MUNICIPALITIES OVER 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	92	20	72	53.4	19.2	105.4
Jacksonville	52	12	40	77.7	39.0	110.8
Tampa	12	4	8	24.9	15.0	66.7
Pensacola	25	3	22	107.8	22.4	224.5
Miami	3	1	2	19.2	10.1	35.1

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	18	6	12	35.0	18.2	64.9
Lakeland	2	2	..	27.4	41.7	...
St. Petersburg.....	1	1	..	13.9	20.4	...
Gainesville	3	..	3	44.8	...	96.8
Orlando	5	1	4	78.1	24.4	166.7
St. Augustine.....	3	2	1	54.5	52.6	62.5
Ocala	2	..	2	37.0	...	74.1
Tallahassee	2	..	2	38.5	...	69.0

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	21	8	13	40.2	28.0	54.2
Palatka	2	..	2	43.5	...	80.0
Daytona	2	1	1	44.4	50.0	40.0
DeLand	1	1	..	28.6	47.6	...
Bartow	1	1	..	29.4	50.0	...
Apalachicola	6	..	6	176.5	...	352.9
Bradentown	1	..	1	30.3	...	100.0
Plant City.....	6	5	1	187.5	238.1	90.9
Fernandina	2	..	2	64.5	...	100.0

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	8	5	3	17.2	15.1	22.4
Fort Meade.....	2	2	..	90.9	133.3	...
Panama City.....	1	..	1	50.0	...	166.7
Clearwater	1	1	..	52.6	83.3	...
Tarpon Springs.....	1	..	1	52.6	...	200.0
Fort Lauderdale.....	1	1	..	52.6	76.9	...
Wauchula	1	1	..	55.6	55.6	...
Milton	1	..	1	71.4	...	200.0

MUNICIPALITIES 500 TO 1,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	2	..	2	13.6	...	46.5
Lake Helen.....	1	..	1	...	...	...
Lawtey	1	..	1	...	...	...

MUNICIPALITIES LESS THAN 500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	2	2	..	21.1	28.6	...
Avon Park.....	1	1	..	...	...	...
Sebring	1	1	..	...	...	...

DEATHS FROM TUBERCULOSIS—ALL FORMS

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	585	222	363	168.1	102.8	274.8

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	371	128	243	215.3	123.1	355.8
Jacksonville	162	35	127	242.2	113.6	341.8
Tampa	94	43	51	195.0	118.8	425.0
Pensacola	53	15	38	228.4	111.9	387.8
Key West.....	39	25	14	210.8	183.8	285.7
Miami	23	10	13	147.4	101.0	228.1

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	96	47	49	186.4	141.4	264.9
West Tampa.....	13	12	1	266.7	173.9	100.0
Lakeland	12	6	6	219.2	125.0	240.0
St. Petersburg.....	15	9	6	208.3	183.7	260.9
Gainesville	9	2	7	134.3	55.6	225.8
Orlando	17	9	8	265.6	219.5	333.3
St. Augustine.....	13	7	6	236.4	184.2	375.0
Ocala	15	1	14	277.8	37.0	518.5
Tallahassee	2	1	1	38.5	43.5	34.5

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	61	18	43	116.6	63.1	179.2
Sanford	6	2	4	120.0	80.0	160.0
Palatka	10	1	9	217.4	47.6	360.0
Daytona	4	2	2	88.9	100.0	80.0
Kissimmee	2	1	1	47.6	31.3	100.0
West Palm Beach.....	2	1	1	48.8	43.5	55.6
DeLand	5	2	3	142.9	95.2	214.3
Quincy	4	..	4	114.3	....	173.9
Lake City	2	1	1	58.8	55.6	62.5
Bartow	1	1	..	29.4	50.0	....
Apalachicola	8	2	6	235.3	117.6	352.9
Fort Myers.....	4	3	1	125.0	136.4	100.0
Plant City.....	8	2	6	250.0	95.2	545.5
Fernandina	5	..	5	161.3	....	250.0

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	43	22	21	92.5	66.5	156.7
Marianna	6	1	5	250.0	83.0	416.7
Fort Meade.....	1	..	1	45.5	....	166.7
DeFuniak Springs.....	1	1	..	47.6	71.4	....
St. Cloud.....	1	1	..	47.6	47.6	....
Dade City.....	2	..	2	100.0	....	333.3
Fort Pierce.....	2	1	1	105.3	76.9	166.7
Clearwater	1	..	1	52.6	....	142.9
Tarpon Springs.....	6	1	5	315.8	71.4	1,000.0
Fort Lauderdale.....	1	..	1	52.6	....	166.7
Wauchula	4	4	..	222.2	222.2	....
Sarasota	1	1	..	58.8	83.3	....
Jasper	1	..	1	62.5	....	142.9
South Jacksonville.....	7	4	3	466.6	307.7	1,500.0
Milton	1	1	..	71.4	111.1	....
Leesburg	1	1	..	71.4	111.1	....
Lynn Haven.....	1	1	..	76.9	83.3	....
Starke	2	1	1	166.7	100.0	500.0
Winter Haven.....	1	1	..	83.3	90.9	....
Eustis	3	3	..	272.7	428.6	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	10	4	6	68.0	38.4	195.4
Crescent City.....	1	1	..	....	....	....
Lake Helen.....	2	1	1	....	....	....
Apopka.....	1	1	..	....	....	....
Mount Dora.....	1	..	1	....	....	....
Eau Gallie.....	1	1	..	....	....	....
Lawtey.....	3	..	3	....	....	....
Dania.....	1	..	1	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	4	3	1	42.1	42.9	40.0
Callahan.....	1	..	1	....	....	....
Tavares.....	1	1	..	....	....	....
Pinellas Park.....	2	2	..	....	....	....

PULMONARY TUBERCULOSIS DEATHS

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	535	195	340	153.7	90.1	257.4

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	336	110	226	195.0	105.8	330.9
Jacksonville.....	151	30	121	225.7	97.4	334.7
Tampa.....	79	34	45	163.9	93.9	375.0
Pensacola.....	52	14	38	224.1	104.5	387.8
Key West.....	33	23	10	178.4	169.1	204.0
Miami.....	21	9	12	134.6	90.9	210.5

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	88	44	44	170.9	133.3	237.8
West Tampa.....	11	10	1	141.0	144.9	100.0
Lakeland.....	9	5	4	123.3	104.2	160.0
St. Petersburg.....	15	9	6	208.3	183.7	260.9
Gainesville.....	9	2	7	134.3	55.6	228.8
Orlando.....	16	9	7	250.0	219.5	291.7
St. Augustine.....	13	7	6	236.4	184.2	375.0
Ocala.....	13	1	12	240.7	37.0	444.4
Tallahassee.....	2	1	1	38.5	43.5	34.5

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	55	13	42	105.2	45.6	175.0
Sanford.....	5	1	4	100.0	40.0	160.0
Palatka.....	10	1	9	217.3	47.6	360.0
Daytona.....	4	2	2	88.9	100.0	80.0
Kissimmee.....	2	1	1	47.6	31.3	100.0
West Palm Beach.....	1	..	1	24.4	....	55.6
DeLand.....	4	1	3	114.3	47.6	214.3
Quincy.....	4	..	4	114.3	....	173.9
Lake City.....	2	1	1	58.8	55.6	62.5
Bartow.....	1	1	..	29.4	50.0	....
Apalachicola.....	8	2	6	235.3	117.6	353.0
Fort Myers.....	2	1	1	62.5	45.5	100.0
Plant City.....	8	2	6	250.0	95.2	545.5
Fernandina.....	4	..	4	129.0	....	200.0

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	42	21	21	90.3	63.4	156.7
Marianna.....	6	1	5	250.0	83.3	416.7
Fort Meade.....	1	..	1	45.5	....	166.7
DeFuniak Springs.....	1	1	..	47.6	71.4	....
St. Cloud.....	1	1	..	47.6	47.6	....
Dade City.....	2	..	2	100.0	....	333.3
Fort Pierce.....	2	1	1	105.3	76.9	166.7
Clearwater.....	1	..	1	52.6	....	142.9
Tarpon Springs.....	6	1	5	315.8	71.4	1,000.0
Fort Lauderdale.....	1	..	1	52.6	....	166.7
Wauchula.....	4	4	..	222.2	222.2	....
Sarasota.....	1	1	..	58.8	83.3	....
Jasper.....	1	..	1	62.5	....	142.9
South Jacksonville.....	7	4	3	466.7	307.7	1,500.0
Milton.....	1	1	..	71.4	111.1	....
Leesburg.....	1	1	..	71.4	111.1	....
Starke.....	2	1	1	166.7	100.0	500.0
Winter Haven.....	1	1	..	83.3	90.9	....
Eustis.....	3	3	..	272.7	428.6	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	10	4	6	68.0	38.5	139.5
Crescent City.....	1	1	..	....	....	....
Lake Helen.....	2	1	1	....	....	....
Apopka.....	1	1	..	....	....	....
Mount Dora.....	1	..	1	....	....	....
Eau Gallie.....	1	1	..	....	....	....
Lawtey.....	3	..	3	....	....	....
Dania.....	1	..	1	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	4	3	1	42.0	42.9	40.0
Callahan.....	1	..	1	....	....	....
Tavares.....	1	1	..	....	....	....
Pinellas Park.....	2	2	..	....	....	....

DEATHS FROM SYPHILIS

		Number of Deaths			Rate per 100,000 Population		
		Total	White	Negro	Total	White	Negro
All Municipalities.....		65	15	50	18.7	6.9	37.9

MUNICIPALITIES OVER 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	38	10	28	22.1	9.6	41.0
Jacksonville	28	4	24	41.9	13.0	66.5
Tampa	5	3	2	10.4	8.3	16.7
Key West.....	2	2	..	10.8	14.7	....
Miami	3	1	2	19.2	10.0	35.1

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	10	1	9	19.4	3.0	48.6
West Tampa.....	1	..	1	12.8	....	100.0
St. Petersburg.....	1	..	1	13.9	....	43.5
Gainesville	2	..	2	29.9	....	64.5
Orlando	3	..	3	46.9	....	125.0
St. Augustine.....	1	..	1	18.2	....	62.5
Ocala	1	..	1	18.5	....	37.0
Tallahassee	1	1	..	19.2	43.5	....

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	10	2	8	19.1	7.0	33.3
Palatka	3	1	2	65.2	47.6	80.0
DeLand	3	..	3	85.7	....	214.3
Apalachicola	2	..	2	58.8	....	117.6
Plant City.....	2	1	1	62.5	47.6	90.9

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	6	2	4	12.9	6.0	29.9
Marianna	1	..	1	41.7	....	83.3
Fort Meade.....	1	..	1	45.5	....	166.7
Dade City.....	1	..	1	50.0	....	166.7
Fort Pierce.....	2	1	1	105.3	76.9	166.7
South Jacksonville.....	1	1	..	66.7	76.9	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	1	..	1	10.5	....	40.0
Interlachen	1	..	1	....	....	....

CANCER DEATHS

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	192	143	49	55.2	66.2	37.1

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	120	89	31	69.6	85.6	45.4
Jacksonville	34	23	11	50.8	74.7	30.1
Tampa	38	33	5	78.8	91.2	41.7
Pensacola	14	11	3	60.3	82.1	30.6
Key West.....	18	12	6	97.3	88.2	122.4
Miami	16	10	6	102.6	101.0	105.3

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	34	24	10	66.0	72.7	54.1
West Tampa.....	4	4	..	51.3	58.0	....
Lakeland	3	2	1	41.1	41.7	40.0
St. Petersburg.....	6	6	..	83.3	122.4	....
Gainesville	4	2	2	59.7	55.6	64.5
Orlando	8	5	3	125.0	122.0	125.0
St. Augustine.....	2	2	..	36.4	52.6	....
Ocala	5	2	3	95.6	74.1	111.1
Tallahassee	2	1	1	38.5	43.5	34.5

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	20	15	5	38.2	52.6	20.8
Sanford	2	2	..	40.0	80.0	....
Daytona	3	3	..	66.7	150.0	....
Kissimmee	1	1	..	23.8	31.3	....
West Palm Beach.....	2	1	1	48.8	43.5	55.6
DeLand	1	..	1	28.6	....	71.4
Quincy	1	1	..	28.6	90.9	....
Lake City.....	1	1	..	29.4	55.6	....
Apalachicola	2	1	1	58.8	58.8	58.8
Bradentown	1	1	..	30.3	43.5	....
Fort Myers.....	2	1	1	62.5	45.5	100.0
Plant City.....	1	1	..	31.3	47.6	....
Fernandina	3	2	1	96.7	166.7	50.0

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	13	10	3	28.0	30.2	22.4
Marianna	1	1	..	41.7	83.3	....
DeFuniak Springs.....	2	1	1	95.2	71.4	142.9
St. Cloud.....	2	2	..	95.2	95.2	....
Tarpon Springs.....	2	..	2	105.3	....	400.0
South Jacksonville.....	3	3	..	200.0	230.8	....
Titusville	1	1	..	76.9	125.0	....
Lynn Haven.....	1	1	..	76.9	83.3	....
Winter Haven.....	1	1	..	83.3	90.9	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	2	2	..	13.6	19.2	....
Mount Dora.....	1	1	..	....	....	....
Umatilla	1	1	..	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	3	3	..	31.6	42.9	....
Melbourne	1	1	..	....	....	....
Sebring	1	1	..	....	....	....
Wellborn	1	1	..	....	....	....

HEART DISEASE DEATHS

All Municipalities.....	Total 332	Number of Deaths		Rate per 100,000 Population
		White 201	Negro 131	Total 95.4 White 93.1 Negro 99.2

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population
		White	Negro	Total White Negro
Total.....	169	100	69	98.1 96.2 101.0
Jacksonville	77	37	40	115.1 100.1 110.8
Tampa	37	24	13	76.8 66.3 108.3
Pensacola	30	19	11	129.3 141.8 112.2
Key West.....	14	12	2	75.7 88.2 40.8
Miami	11	8	3	70.5 80.8 52.6

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population
		White	Negro	Total White Negro
Total.....	71	46	25	137.9 139.4 135.1
West Tampa.....	3	2	1	38.5 29.0 100.0
Lakeland	4	3	1	54.8 62.5 40.0
St. Petersburg.....	24	20	4	333.3 408.2 173.9
Gainesville	4	..	4	59.7 129.0
Orlando	15	10	5	234.4 243.9 208.3
St. Augustine.....	11	7	4	200.0 184.2 250.0
Ocala	7	2	5	129.5 74.1 185.2
Tallahassee	3	2	1	57.7 87.0 34.5

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population
		White	Negro	Total White Negro
Total.....	51	28	23	97.5 98.1 95.8
Sanford	3	2	1	60.0 80.0 40.0
Palatka	8	7	1	173.9 333.3 40.0
Daytona	11	8	3	244.4 400.0 120.0
Kissimmee	1	1	..	23.8 31.3
West Palm Beach.....	2	..	2	48.8 111.1
Quincy	1	1	..	28.6 90.9
Lake City.....	3	2	1	88.2 111.1 62.5
Apalachicola	4	..	4	117.6 235.3
Fort Myers.....	7	5	2	218.8 227.3 200.0
Plant City.....	2	2	..	62.5 95.2
Fernandina	9	..	9	290.3 450.0

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population
		White	Negro	Total White Negro
Total.....	31	21	10	66.7 63.4 74.6
Marianna	1	1	..	41.6 83.3
DeFuniak Springs.....	2	1	1	95.2 71.4 142.9
St. Cloud.....	9	9	..	428.7 428.7
Fort Pierce.....	2	..	2	105.3 333.3
Tarpon Springs.....	1	..	1	52.6 200.0
Fort Lauderdale.....	2	1	1	105.3 76.9 166.7
Sarasota	1	..	1	58.8 200.0
South Jacksonville.....	3	2	1	200.0 153.8 500.0
Manatee	1	..	1	66.7 125.0
Zephyrhills	1	1	..	66.7 71.4
Titusville	1	1	..	76.9 125.0
Lynn Haven.....	2	2	..	153.8 166.7
Eustis	4	3	1	360.4 428.6 250.0
Port Tampa City.....	1	..	1	90.9 200.0

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population
		White	Negro	Total White Negro
Total.....	8	5	3	54.4 48.1 69.8
Okeechobee	2	2	..	............
Delray	2	1	1	............
Crescent City.....	1	..	1	............
Winter Park.....	1	1	..	............
Dania	1	..	1	............
Auburndale	1	1	..	............

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population
		White	Negro	Total White Negro
Total.....	2	1	1	21.1 14.3 40.0
Citra	1	1	..	............
Sebring	1	..	1	............

BRONCHO PNEUMONIA DEATHS

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
All Municipalities.....	74	45	29	21.3	20.8	22.0

MUNICIPALITIES OVER 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	56	31	25	32.5	29.8	36.6
Jacksonville	33	13	20	49.3	42.2	55.4
Tampa	15	13	2	31.1	35.9	16.7
Pensacola	1	..	1	4.3	....	10.2
Key West.....	7	5	2	37.8	36.8	40.8

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	11	9	2	21.4	27.3	10.8
West Tampa.....	4	4	..	51.3	58.0	....
Lakeland	3	2	1	41.1	41.7	40.0
St. Petersburg.....	1	1	..	13.9	20.8	....
Gainesville	1	..	1	14.9	....	32.3
Orlando	2	2	..	30.1	48.8	....

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	4	2	2	7.6	7.0	8.3
Sanford	1	..	1	20.0	....	40.0
Palatka	1	1	..	21.7	47.6	....
Daytona	1	..	1	22.2	....	40.0
Fort Myers.....	1	1	..	31.3	45.5	....

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	2	2	..	4.3	6.0	....
DeFuniak Springs.....	1	1	..	47.6	71.4	....
St. Andrews.....	1	1	..	71.4	100.0	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	1	1	..	10.5	14.3	....
Favares	1	1	..	....	....	....

LOBAR PNEUMONIA DEATHS

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	184	102	82	52.9	47.2	62.1

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	119	56	63	69.1	53.8	92.2
Jacksonville	50	18	32	74.7	58.4	88.6
Tampa	28	20	8	58.1	55.2	66.7
Pensacola	20	9	11	86.2	67.1	112.2
Key West.....	11	7	4	59.5	51.5	81.6
Miami	10	2	8	64.1	20.2	140.4

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	32	23	9	62.1	69.7	48.6
West Tampa.....	2	2	..	25.6	29.0	....
Lakeland	1	1	..	13.7	20.8	....
St. Petersburg.....	5	3	2	69.4	61.2	87.0
Gainesville	8	5	3	119.4	138.9	96.8
Orlando	8	5	3	125.0	122.0	125.0
St. Augustine.....	2	2	..	36.4	52.6	....
Ocala	2	2	..	37.0	74.1	....
Tallahassee	4	3	1	76.9	130.4	34.5

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	14	10	4	26.8	35.1	16.7
Sanford	1	1	..	20.0	40.0	....
Palatka	3	1	2	65.2	47.6	80.0
Daytona	2	2	..	44.4	100.0	....
DeLand	1	1	..	28.6	47.6	....
Lake City.....	1	1	..	29.4	55.6	....
Apalachicola	1	1	..	29.4	58.8	....
Fort Myers.....	1	1	..	31.3	45.5	....
Plant City.....	3	2	1	93.8	95.2	90.9
Fernandina	1	..	1	32.3	....	50.0

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	11	8	3	23.7	24.2	22.4
Marianna	1	..	1	41.7	....	83.3
Fort Meade.....	1	1	..	45.5	66.7	....
Tarpon Springs.....	1	..	1	52.6	....	200.0
Fort Lauderdale.....	1	..	1	52.6	....	166.7
Wauchula	1	1	..	55.6	55.6	....
Sarasota	1	1	..	58.8	83.3	....
Zephyrhills	2	2	..	133.3	142.9	....
Milton	1	1	..	71.4	111.1	....
St. Andrews.....	1	1	..	71.4	100.0	....
Eustis	1	1	..	90.9	142.9	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	7	5	2	47.6	48.1	46.5
Ormond	1	..	1	....	....	....
Lake Butler.....	1	1	..	....	....	....
Crescent City.....	1	1	..	....	....	....
Lake Helen.....	1	..	1	....	....	....
Mount Dora.....	2	2	..	....	....	....
Lawtey	1	1	..	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	1	..	1	10.5	....	40.0
Coleman	1	..	1	....	....	....

DIARRHOEA AND ENTERITIS DEATHS

(Under 2 Years)

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	221	137	84	63.5	63.4	63.6

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	142	83	59	82.4	79.8	86.4
Jacksonville.....	35	13	22	52.3	42.2	60.9
Tampa.....	50	46	4	103.7	127.1	33.3
Pensacola.....	17	9	8	73.3	67.2	81.6
Key West.....	24	11	13	129.7	80.9	265.3
Miami.....	16	4	12	102.6	40.4	210.5

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	36	25	11	69.9	75.8	59.5
West Tampa.....	16	14	2	205.1	202.9	206.2
Lakeland.....	6	4	2	82.2	83.3	80.0
St. Petersburg.....	6	2	4	83.3	40.8	173.9
Gainesville.....	3	3	..	44.8	83.3	....
Orlando.....	2	1	1	31.3	24.4	41.7
St. Augustine.....	1	..	1	18.2	....	62.5
Ocala.....	1	..	1	18.5	....	37.0
Tallahassee.....	1	1	..	19.2	43.5	....

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	12	8	4	22.9	28.0	16.7
Daytona.....	2	1	1	44.4	50.0	40.0
Kissimmee.....	1	1	..	23.8	31.3	....
West Palm Beach.....	1	1	..	24.4	43.5	....
DeLand.....	1	1	..	28.6	47.6	....
Quincy.....	1	..	1	28.6	....	43.5
Lake City.....	3	2	1	88.2	111.1	62.5
Apalachicola.....	2	1	1	58.8	58.8	58.8
Fort Myers.....	1	1	..	31.3	45.5	....

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	22	13	9	47.3	39.3	67.2
Marianna.....	1	..	1	41.7	....	83.3
Fort Meade.....	3	3	..	136.4	200.0	....
DeFuniak Springs.....	2	2	..	95.2	142.9	....
Clearwater.....	1	1	..	52.6	83.3	....
Tarpon Springs.....	1	..	1	52.6	....	200.0
Fort Lauderdale.....	3	1	2	157.9	76.9	333.3
Wauchula.....	1	1	..	55.6	55.6	....
Sarasota.....	3	1	2	175.5	83.3	400.0
East Millville.....	1	1	..	66.7	90.9	....
South Jacksonville.....	1	..	1	66.7	....	500.0
Manatee.....	2	..	2	133.3	....	250.0
Milton.....	2	2	..	142.9	222.2	....
Winter Haven.....	1	1	..	83.3	90.9	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	7	7	..	47.6	67.3	....
Okeechobee.....	2	2	..	....	....	....
Fellsmere.....	1	1	..	....	....	....
Lake Butler.....	1	1	..	....	....	....
Lake Worth.....	2	2	..	....	....	....
Auburndale.....	1	1	..	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	2	1	1	21.2	14.3	40.0
Center Hill.....	1	1	..	....	....	....
Dunedin.....	1	..	1	....	....	....

CHRONIC NEPHRITIS DEATHS

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	375	232	143	107.7	107.4	108.3

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	239	137	102	138.7	131.7	149.4
Jacksonville	129	65	64	192.8	211.0	177.3
Tampa	42	27	15	87.1	74.6	125.0
Pensacola	20	10	10	86.2	74.6	102.0
Key West.....	33	26	7	178.4	191.2	142.9
Miami	15	9	6	96.2	90.9	105.3

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	62	44	18	120.4	133.3	97.3
West Tampa.....	4	4	..	51.3	58.0	..
Lakeland	13	11	2	178.1	229.2	80.0
St. Petersburg.....	7	6	1	97.2	122.4	43.5
Gainesville	4	3	1	59.7	83.3	32.3
Orlando	12	11	1	187.5	268.3	41.7
St. Augustine.....	4	2	2	78.8	52.6	125.0
Ocala	13	6	7	240.7	222.2	259.3
Tallahassee	5	1	4	96.2	43.5	138.1

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	39	22	17	74.6	77.1	70.8
Sanford	2	2	..	40.0	80.0	..
Palatka	9	6	3	195.7	285.7	120.0
Daytona	2	..	2	44.4	..	80.0
West Palm Beach.....	2	1	1	48.8	43.5	55.6
DeLand	4	4	..	114.3	190.5	..
Quincy	4	1	3	114.3	90.9	130.4
Lake City.....	1	..	1	29.4	..	62.5
Bartow	4	3	1	117.6	150.0	71.4
Apalachicola	5	2	3	147.1	117.6	176.5
Bradentown	1	..	1	30.3	..	100.0
Fort Myers.....	4	2	2	125.0	90.9	200.0
Plant City.....	1	1	..	31.2	47.6	..

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	23	18	5	49.5	54.4	37.3
Marianna	1	..	1	41.7	..	83.3
St. Cloud	2	2	..	95.2	95.2	..
Panama City.....	1	1	..	50.0	66.7	..
Dade City.....	2	2	..	100.0	153.8	..
Tarpon Springs.....	1	..	1	52.6	..	200.0
Sarasota	1	1	..	58.8	83.3	..
East Millville.....	1	1	..	66.7	90.9	..
South Jacksonville.....	3	2	1	200.0	153.8	500.0
Manatee	1	1	..	66.7	142.9	..
Zephyrhills	1	1	..	66.7	71.4	..
Titusville	1	..	1	76.9	..	200.0
Lynn Haven.....	5	5	..	384.6	416.7	..
Winter Haven.....	1	1	..	83.3	90.9	..
Port Tampa City.....	1	..	1	90.9	..	200.0
Pablo Beach.....	1	1	..	100.0	142.9	..

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	8	7	1	54.4	67.3	23.3
Carrabelle	1	1	..	..	..	..
Crescent City.....	1	1	..	..	..	..
Mount Dora.....	1	1	..	..	..	..
Eau Gallie.....	1	1	..	..	..	..
Lawtey	3	2	1	..	..	..
Lake Worth.....	1	1	..	..	..	..

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	4	4	..	42.1	57.1	..
Callahan	1	1	..	..	..	..
Citra	1	1	..	..	..	..
Coleman	1	1	..	..	..	..
Taft	1	1	..	..	..	..

PUERPERAL STATE DEATHS

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
All Municipalities.....	92	51	41	26.4	23.6	31.0

MUNICIPALITIES OVER 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	54	28	26	31.3	36.8	36.1
Jacksonville	32	13	19	17.8	32.1	52.6
Tampa	9	6	3	18.7	16.6	25.0
Pensacola	8	4	4	34.5	29.9	40.8
Key West.....	2	2	..	10.8	14.7	....
Miami	3	3	..	19.2	30.3	....

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	12	6	6	23.3	18.2	32.4
West Tampa.....	1	1	..	12.8	14.5	....
St. Petersburg.....	2	1	1	27.8	20.4	43.5
Gainesville	3	1	2	44.8	27.8	64.5
Orlando	4	2	2	62.5	48.8	83.3
St. Augustine.....	1	1	..	18.2	26.3	....
Ocala	1	..	1	18.5	....	37.0

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	12	7	5	22.9	24.5	20.8
West Palm Beach.....	1	1	..	24.4	43.5	....
DeLand	1	1	..	28.6	47.6	....
Quincy	2	1	1	57.1	90.9	43.5
Lake City.....	2	1	1	58.8	55.6	62.5
Bartow	2	1	1	58.8	50.0	71.4
Apalachicola	2	..	2	58.8	....	117.6
Bradentown	2	2	..	60.6	87.0	....

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	10	6	4	21.5	18.1	29.9
Dade City.....	1	1	..	50.0	76.9	....
Fort Pierce.....	1	1	..	52.6	76.9	....
Tarpon Springs.....	1	..	1	52.6	....	200.0
Wauchula	2	2	..	111.1	111.1	....
Sarasota	1	..	1	58.8	....	200.0
Chipley	1	1	..	62.5	100.0	....
South Jacksonville.....	1	..	1	66.7	....	500.0
Starke	1	1	..	83.3	100.0	....
Eustis	1	..	1	90.9	250.0

MUNICIPALITIES 500 TO 1,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	2	2	..	13.9	19.2	....
Mount Dora.....	1	1	..	....	....	....
Lake Worth.....	1	1	..	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	2	2	..	21.1	28.6	....
Sebring	1	1	..	....	....	....
Pinellas Park.....	1	1	..	....	....	....

SUICIDES

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
All Municipalities.....	45	37	8	12.9	17.1	6.1

MUNICIPALITIES OVER 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	39	31	8	22.6	29.8	11.7
Jacksonville	12	11	1	17.9	35.7	2.8
Tampa	15	12	3	31.1	33.1	25.0
Pensacola	2	2	..	8.6	14.9	....
Key West.....	3	3	..	16.2	22.1	....
Miami	7	3	4	44.9	30.3	70.2

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	5	5	..	9.7	15.1	....
West Tampa.....	2	2	..	25.6	29.0	....
St. Petersburg.....	2	2	..	27.7	40.8	....
St. Augustine.....	1	1	..	18.2	26.3	....

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Total	Number of Deaths		Rate per 100,000 Population		
		White	Negro	Total	White	Negro
Total.....	1	1	..	2.2	3.0	....
Panama City.....	1	1	..	50.0	66.7	....

HOMICIDES

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
All Municipalities.....	91	19	72	26.1	8.8	54.5

MUNICIPALITIES OVER 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	56	13	43	32.5	12.5	63.0
Jacksonville	37	7	30	55.3	22.7	83.1
Tampa	9	4	5	18.7	11.0	41.7
Pensacola	2	..	2	8.6	....	20.4
Key West.....	1	1	..	5.4	7.4	....
Miami	7	1	6	44.9	10.1	105.2

MUNICIPALITIES 5,000 TO 10,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	10	..	10	19.4	....	54.0
West Tampa.....	2	..	2	25.6	....	200.0
St. Petersburg.....	2	..	2	27.8	....	87.0
St. Augustine.....	3	..	3	54.5	....	187.5
Ocala	2	..	2	37.0	....	74.1
Tallahassee	1	..	1	19.2	....	34.5

MUNICIPALITIES 2,500 TO 5,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	9	..	9	17.2	....	37.5
Sanford	4	..	4	80.0	....	160.0
Palatka	1	..	1	21.7	....	40.0
DeLand	1	..	1	28.6	....	71.4
Quincy	1	..	1	28.6	....	43.5
Apalachicola	1	..	1	29.4	....	58.8
Plant City.....	1	..	1	31.3	....	90.9

MUNICIPALITIES 1,000 TO 2,500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	8	3	5	17.2	9.1	37.3
Fort Meade.....	1	..	1	45.5	....	166.7
Dade City.....	1	..	1	50.0	....	166.7
Fort Pierce.....	2	1	1	105.3	76.9	166.7
Tarpon Springs.....	2	1	1	105.3	71.4	200.0
Eustis	1	..	1	90.9	....	250.0
Port Tampa City.....	1	1	..	90.9	166.7	....

MUNICIPALITIES 500 TO 1,000 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	5	2	3	34.0	19.2	69.8
Crescent City.....	2	1	1	....	....	....
Mount Dora.....	1	..	1	....	....	....
Dania	2	1	1	....	....	....

MUNICIPALITIES LESS THAN 500 POPULATION

	Number of Deaths			Rate per 100,000 Population		
	Total	White	Negro	Total	White	Negro
Total.....	3	1	2	31.6	14.3	80.0
Tavares	1	..	1	....	....	....
Coleman	1	1	..	....	....	....
Reddick	1	..	1	....	....	....

KITTY:—"Just got up — spent the night on my mistress' bed. As she is sick with infantile paralysis, I must hunt my own breakfast in the neighborhood."



REDRAWN FROM "MONTHLY BULLETIN CONN STATE BOARD OF HEALTH."

FLORIDA



HEALTH NOTES

OFFICIAL BULLETIN

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No. 7 (New Series)

HON. FRANK J. FEARNSIDE, President
Palatka, Fla.

HON. S. R. MALLORY KENNEDY, M. D.
Pensacola, Fla.

HON. C. G. MEMMINGER
Lakeland, Fla.

EDITED BY
JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

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Jacksonville

BRANCH OFFICES

ASSISTANTS TO THE STATE HEALTH OFFICER
Tampa Key West St. Augustine
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BACTERIOLOGICAL LABORATORIES

CENTRAL LABORATORY
Jacksonville

BRANCH LABORATORIES

Tampa Pensacola Miami
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

Geddings, Dr. H. D.,
c/o U.S.M.H. Serv. Per.

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Publication 89, Hog Cholera, January, 1912, pp. 12.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
- Publication 102, Typhoid Fever in Tampa, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 24.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 121, Vital Statistics, All Florida Municipalities can have Vital Statistics, Leaflet, Reprint from Florida Health Notes, August, 1914.
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 137, Report of Surgeon in Charge of Work under the "Crippled Children" Act, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 8, illustrated.
- Publication 138, Annual Report of Veterinary Department of the State Board of Health of Florida, Reprint from Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 57.
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.
- Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.
- Publication 158, Malaria, April, 1916, pp. 4.
- Publication 159, Some Poultry Pests, April, 1916, pp. 10.
- Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).
- Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.
- Publication 163, Hog Cholera, pp. 30.

LISTEN

A most interesting and instructive article, divested of all technical language on "The Nature, Manner of Conveyance, and Means of Prevention of Infantile Paralysis," by Dr. Simon Flexner, Director of Laboratories of the Rockefeller Institute for Medical Research, can be had by writing to the Rockefeller Institute for Medical Research, New York City. The Notes advises its readers to obtain a copy of this article any way, those who may be interested in the subject which is engrossing the attention of the public at present, and especially parents of young children.

DO NOT GET EXCITED OVER INFANTILE PARALYSIS

According to the State Department of Health the infantile paralysis situation should not cause undue alarm. Attention should also be given to other diseases that are of far greater importance. Among these diseases may be mentioned typhoid fever, diphtheria, scarlet fever, measles, whooping cough, tuberculosis, and summer diarrhea of infants. Each of these diseases is of much more importance in the actual number of deaths caused than is infantile paralysis.

While it is necessary, of course, to take adequate measures against any disease that threatens to become epidemic, it is essential that efforts for disease prevention be directed with reference to the importance of the various diseases.

In the midst of the present unwarranted turmoil over infantile paralysis, the State Department of Health does not wish the people to forget that many more babies will be stricken with diarrhea this summer than with infantile paralysis; nor does it wish them to forget that tuberculosis is still the greatest single cause of death in New Jersey.—Press Service, New Jersey Department of Health.

A TOWN'S BEST ADVERTISING

"A town without flies is the best advertising a town can have," said a business man the other day. And when he was asked why he thought so, he replied: "There are several reasons. First, everybody knows that a town without flies is a clean town, a healthful town, where health matters receive due attention. You would expect to find in it clean streets and alleys, clean food shops and markets, and clean grocery stores and restaurants. It is where you would feel easy to sit down and eat without feeling suspicious about the food that is served you.

"In the second place, it is a town that has no filthy, fly-breeding stables and open surface closets. It takes care of its sewage and garbage and deems the health of its citizens worth protecting. For this season you feel like such a town is a good place in which to live.

"In the third place, it would be a town practically free from typhoid fever, infantile diseases, cholera and other fly-borne diseases, to say nothing of other improved health conditions and the comforts brought about by cleanliness and the absence of flies."

"But how are you going to have a flyless town?" the speaker was asked. "By going after the stables first," said he, "and then by cleaning up the rest of the town and keeping it clean. To afford flies no place to breed," said the speaker, "is the only way not to have flies. Towns that have succeeded in controlling the fly menace went straight for the stables first and then for the open closets and other dirty places where flies find breeding places. Dr. L. M. McCormick, the fly-fighter of Asheville, says: 'There is no royal road to freedom from flies but *Clean Up* and *Keep Clean* is the winning slogan.'"—Press Service, North Carolina State Board of Health.

HOW THE GOVERNMENT IS MEETING THE MALARIA PROBLEM

Four per cent of the inhabitants of certain sections of the South have malaria. This estimate, based on the reporting of 204,881 cases during 1914, has led the United States Public Health Service to give increased attention to the malaria problem, according to the annual report of the Surgeon General. Of 13,526 blood specimens examined by Government officers during the year, 1,797 showed malarial infection. The infection rate among white persons was above eight per cent, and among colored persons twenty per cent. In two counties in the Yazoo Valley, 40 out of every 100 inhabitants presented evidence of the disease.

Striking as the above figures are they are no more remarkable than those relating to the reduction in the incidence of the disease following surveys of the Public Health Service at 34 places in nearly every state of the South. In some instances from an incidence of fifteen per cent, in 1914, a reduction has been accomplished to less than four or five per cent in 1915.

One of the important scientific discoveries made during the year was in regard to the continuance of the disease from season to season. Over 2,000 Anopheline mosquitoes in malarious districts were dissected, during the early Spring months, without finding a single infected insect, and not until May 15, 1915, was the first parasite in the body of a mosquito discovered. The Public Health Service, therefore, concludes that mosquitoes in the latitude of the Southern States ordinarily do not carry the infection through the winter. This discovery indicates that protection from malaria may be secured by treating human carriers with quinine previous to the middle of May, thus preventing any infection from chronic sufferers reaching mosquitoes and being transmitted by them to other persons.

Although quinine remains the best means of treating malaria and is also of marked benefit in preventing infection, the eradication of the disease as a whole rests upon the destruction of the breeding places of Anopheline mosquitoes. The Public Health Service, therefore, is urging a definite campaign of draining standing water, the filling of low places, and the regrading and training of streams where malarial mosquitoes breed. The oiling of breeding places, and the stocking of streams with top-feeding minnows, are further recommended. The

Service also gives advice regarding screening, and other preventive measures as a part of the educational campaigns conducted in sections of infected territory.

This study is typical of the scientific investigations which are being carried out by the Public Health Service, all of which have a direct bearing on eradicating the disease. The malaria work now includes the collection of morbidity data, malaria surveys, demonstration work, scientific field and laboratory studies, educational campaigns, and special studies of impounded water and drainage projects.—Health News, U. S. Public Health Service.

PUBLIC HEALTH WORKS

Dr. Herman Biggs, Commissioner of Health for the State of New York has compiled a list of Public Health Works for the guidance of the public libraries of that State in their selection of books of this nature.

Three lists are published, one set can be purchased for \$10.00, another for \$25.00, and a third for \$50.00.

These comprise many works of value which should be included in every public library; and they are accordingly published herewith, for consideration by library bureaus or individuals throughout our own state.

LIST OF BOOKS FOR \$10.00

- | | |
|--|------------------|
| The New Public Health..... | H. W. Hill |
| The Health Master..... | S. H. Adams |
| The Efficient Life..... | L. H. Gulick |
| How to Live..... | Fisher & Fiske |
| Common Diseases..... | Woods Hutchinson |
| Preventable Diseases..... | Woods Hutchinson |
| Exercise and Health..... | Woods Hutchinson |
| Facts About Tuberculosis..... | Lillian Brandt |
| T. B. Playing the Lone Game Consumption..... | Galbraith |
| Prize Essay—Tuberculosis, a Disease of the Masses, and How to Combat It..... | S. A. Knopf |
| Tuberculosis | S. A. Knopf |
| Lectures on Tuberculosis for Nurses..... | Bruce |
| Home Care of the Sick..... | Pope |
| Fundamental Basis of Nutrition..... | Lusk |
| Foods and Household Management..... | Kenney & Cooley |
| *Directions for Home Pasteurization of Milk (Animal Industry Circular 197) paper, 5c | |
| *Dissemination of disease by dairy products, and methods of prevention; 1, Milk as carrier of contagious disease, and desirability of pasteurization; 2, Importance of wholesome milk supply; 3, Relation of tuberculous cow to public health; 4, Interpretation of results of bacteriological examination of milk; 5, Pasteurization, its advantages and disadvantages. (Animal Industry Circular 153.) Paper, 10c. | |
| *Milk and Its Relation to Public Health. (Hygienic Laboratory Bulletin 56.) Paper, \$1.00. | |
| *Production of Clean Milk. (Farmers' Bulletin 602.) Paper, 5c. | |
| *Some Important Factors in Production of Sanitary Milk. (Animal Industry Circular 142.) Paper 5c. | |
| *Vitality and Retention of Virulence by Certain Pathogenic Bacteria in Milk and Its Products. Cloth 75c. (In 15th Animal Industry Report, 1898, pages 224 to 228.) | |

- First Aid in Illness and Injury.....Pilcher
 The Healthy Baby.....Dennett
 A Mother's Guide.....Tweddell
 *(These may be obtained from the Superintendent of Documents, Government Printing
 Office, Washington, D. C.)

LIST OF BOOKS FOR \$25.00

- The New Public Health.....H. W. Hill
 The Health Master.....S. H. Adams
 The Efficient Life.....L. H. Gulick
 How to Live.....Fisher & Fiske
 Air & Health.....Macfie
 Common Diseases.....Woods Hutchinson
 Preventable Diseases.....Woods Hutchinson
 Exercise & Health.....Woods Hutchinson
 Facts About Tuberculosis.....Lillian Brandt
 T. B. Playing the Lone Game Consumption.....Galbraith
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 Combat It.....S. A. Knopf
 Tuberculosis.....S. A. Knopf
 Lectures on Tuberculosis for Nurses.....Bruce
 Home Care of the Sick.....Pope
 Fundamental Basis of Nutrition.....Lusk
 Foods & Household Management.....Kenney & Cooley
 *Directions for Home Pasteurization of Milk. (Animal Industry Circular
 197). Paper 5c.
 *Dissemination of Disease by Dairy Products, and Methods of Prevention;
 1, Milk as Carrier of Contagious Disease, and Desirability of Pasteuriza-
 tion; 2, Importance of Wholesome Milk Supply; 3, Relation of Tubercu-
 lous Cow to Public Health; 4, Interpretation of Results of Bacteriological
 Examination of Milk; 5, Pasteurization, its Advantages, and Dis-
 advantages. (Animal Industry Circular 153.) Paper 10c.
 *Milk and Its Relation to Public Health. (Hygiene Laboratory Bulletin
 56.) Paper, \$1.00.
 *Production of Clean Milk. (Farmer's Bulletin 602.) Paper, 5c.
 *Some Important Factors in Production of Sanitary Milk. (Animal Indus-
 try Circular 142.) Paper, 5c.
 *Vitality and Retention of Virulence by Certain Pathogenic Bacteria in
 Milk and Its Products. Cloth 75c. (In 15th Animal Industry Report,
 1898, pages 224 to 228.)
 Sanitation in Panama.....Gorgas
 First Aid in Illness and Injury.....Pilcher
 Health and Medical Inspection of School Child.....Cornell
 The Healthy Baby.....Dennett
 A Mother's Guide.....Tweddell

REFERENCE

- Preventive Medicine and Hygiene.....Rosenau
 Sources and Modes of Infection.....Chapin
 Diseases of Children.....Holt
 *(These may be obtained from the Superintendent of Documents, Government Printing
 Office, Washington, D. C.)

LIST OF BOOKS FOR \$50.00

- The New Public Health.....H. W. Hill
 The Health Master.....S. H. Adams
 The Efficient Life.....L. H. Gulick
 What Men Live By.....Cabot
 How to Live.....Fisher & Fiske
 Air and Health.....Macfie
 Common Disease.....Woods Hutchinson
 Preventable Diseases.....Woods Hutchinson
 Civilization and Health.....Woods Hutchinson

- Exercise and Health.....Woods Hutchinson
 Community Hygiene.....Woods Hutchinson
 Health, Strength and Power.....Sargent
 Personal Hygiene.....Pyle
 Personal Hygiene & Physical Training for Women.....Galbraith
 Hygiene for the Worker.....Tollman & Guthrie
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 Fresh Air and How to Use It.....Carrington
 Lectures on Tuberculosis for Nurses.....Bruce
 Home Care of the Sick.....Pope
 Nurses' American Red Cross Text Book Studies in Invalid
 Occupation.....Tracy
 Fundamental Basis of Nutrition.....Lusk
 Food Inspection and Analysis.....A. E. Leach
 Food and Household Management.....Kenney & Cooley
 Analysis and Cost of Ready to Serve Foods.....Nephart & Lusk
 *Directions for Home Pasteurization of Milk. (Animal Industry Circular
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 With the Public Schools.....Elsa Dennison
 Health and Medical Inspection of School Child.....Cornell
 Health Work in the Schools.....Hoag & Terman
 The Healthy Baby.....Dennett
 A Mother's Guide.....Tweddell
 How to Feed Children.....Louise E. Hagan
 *(These may be obtained from the Superintendent of Documents, Government Printing
 Office, Washington, D. C.)

REFERENCE

- Preventive Medicine and Hygiene.....Rosenau
 The Milk Question.....Rosenau
 Pathogenic Microorganisms.....Park & Williams
 Sources and Modes of Infection.....Chapin
 Diseases of Children.....Holt
 Sewage Disposal.....Cleveland & Ogden

Health Briefs

THE UNITED STATES PUBLIC HEALTH SERVICE ASKS DO YOU

Clean your teeth and then expectorate in the washbowl?

Omit lunch to reduce weight and then overeat at dinner?

Go to the country for health and then sleep with your windows shut tight?

Wonder why you have earache and then blow your nose with your mouth shut?

Slouchy postures menace health.

Dirty hands spread much disease.

Filth breeds flies—flies carry fever.

It's the baby that lives that counts.

Dirty refrigerators may make sickness.

Life is a constant struggle against death.

Health brings happiness—sickness sorrow.

Every man is the architect of his own health.

Tuberculosis is contagious, preventable, curable.

A clean garbage can is a good example to the family.

The U. S. Public Health Service issues free bulletins on rural sanitation.

A high bred dog has a right to have his birth registered—so has a baby.

The defective citizen of today is oftentimes the unhealthy child of yesterday.

The full dinner pail—the open window—the clean well—make for health.

The U. S. Public Health Service guards American ports to exclude foreign disease.

Correspondence

FEAR OF POLIOMYELITIS COMMUNICATION

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: As my son, 19 years old, is leaving New York City on the 20th inst. by ship to return home, and I have another son eight years of age here at home, will it be best to have the former's clothing and baggage fumigated before he comes into the house—because of the infantile paralysis so prevalent in Brooklyn and Manhattan? Of course, the older one has been only in his hotel at 44th Street and at shows, and places of amusement, not in the infected districts; but I cannot feel otherwise than a bit uneasy about the carrying of germs. Please tell me frankly.

Yours very truly,

Jacksonville, Fla., July 17, 1916.

Dear Madam: Replying to your letter of the 16th inst., yesterday, today received, in regard to any possible danger of communication of poliomyelitis from your son, recently returning from New York to a younger brother now at Palm Beach, I am pleased to disabuse your mind of any threatening danger, unless the elder son, of whom you write has been living at a hotel, has come in close contact with cases of poliomyelitis, so close as to have been an attendant or nurse. I cannot conceive of his clothing being the means of communication of the peculiar infection of this trouble. Just what the cause of poliomyelitis is, I mean the infectious property, is not known as yet, because the virus or germ, whichever it may be, is filterable and passes through a porcelain filter and is ultra microscopic, that is, it cannot be discovered by the microscope. The best authorities agree that the infectious principle resides in the nasal discharge and buccal discharges from the mouth. I do not believe that there is a particle of danger in your elder son coming to you, nor is there any necessity for having his baggage fumigated. If you have any apprehensions, expose the clothing to the sun, which at this time is sufficiently strong to kill any germ life, that has any spore bearing.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

TRANSMISSION OF DIPHTHERIA

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: There are several cases of diphtheria here and the people that are looking after the cases insist on mingling with the public. Is there no way to quarantine this disease for the protection of the people? This town is not incorporated. An early reply will be appreciated.

Jacksonville, Fla., July 18, 1916.

Dear Sir: I have your letter of the 17th inst. with regard to several diphtheria cases, which exist at present in your community. Very little danger need be feared from those present who are caring for these cases, as in the great majority of instances, if not all, the infection is contracted through direct contact with the patient or with the discharge from the nose and throat of the patient. Cases by transmission through a third person are exceedingly rare, and even those reported to have occurred in this way are open to doubt. Therefore, if the patient is isolated, there is very little danger of any spread of the disease from that source. In the event of any further spread of diphtheria in your town I shall be pleased if you will advise me of that fact, in order that a representative of the State Board of Health may be detailed there to assume control of the situation and to institute whatever measures may be necessary to control the disease. Assuring you of any further advice or assistance which I may be able to render you, I am,

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

TREATMENT OF PELLAGRA

Dr. J. Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: My wife has pellagra and I have been informed that you could advise me of a cure for it. I would be glad to have an answer from you at once, stating where I can get the proper medicine for her. She has been bothered with it some six months. It is of a dry form so far, is broken out on her hands and arms, and a little around her mouth and eyes. We came to Florida two years ago from Indiana. Do you think it would be better for her health to take her back north?

Yours very truly,

Jacksonville, Fla., July 21, 1916.

Dear Sir: In reply to your letter of the 17th, I am enclosing herewith a copy of the State Board of Health publication on Pellagra. This little leaflet, while exceedingly brief, states concisely all that is definitely known concerning this disease. I shall be very glad to have one of my Assistants visit you on his next visit through your section of the State, and render you whatever assistance or advice he may. I am inclined to believe that a change of climate would have little if any effect upon this disease.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

ADMINISTRATION OF ANTITOXIN

Dr. Joseph Y. Porter, Jacksonville, Fla.

Dear Doctor: Will you kindly tell me what are the rules regarding a suspected case of diphtheria? In case the doctor is uncertain as to its being diphtheria, what should be the maximum dose of antitoxin? Is there any danger accompanying the use of this remedy in case it is not diphtheria. The child's age is four years. Would 10,000 units be too much to use when it was not positively known to be diphtheria? Is any doctor qualified to make the test? I mean, ordinary practitioners to be found in small towns. Thanking you in advance for this information, I am,

Yours very truly,

Jacksonville, Fla., July 20, 1916.

Dear Sir: I have your letter of July 18th requesting certain information relative to the administration of diphtheria antitoxin. In reply, you are advised that there is no danger whatever in the administration of this serum except in rare cases where previous doses have been administered. In such cases the ill effects are not due to the antitoxin itself, but rather to the blood serum of the horse contained therein. Any animal substance (what is known as foreign proteid) will produce these results which are known as anaphylaxis. In cases where the diagnosis is uncertain, it is always advisable to administer antitoxin for the sake of safety. Diphtheria antitoxin is most efficacious if administered at the very beginning of the disease, and many unnecessary deaths have been due to a desire on the part of the physician or parent to delay treatment until the diagnosis is positive. The administration of antitoxin is very simple and any physician who is capable of giving an ordinary hypodermic can administer this serum. The dosage varies, not according to the child's age, but rather to the severity of the case. It is not uncommon to administer thirty to forty thousand units to a young child. Trusting this will serve to give you the information you wish, I am,

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

HEALTH HEADWAY

Years ago the farmers boarded the "agricultural train" and they have been making better progress ever since. Cars were equipped with exhibits and illustrations of the best methods of raising crops and were drawn through farm neighborhoods. During a three-quarter hour stop the farmers filed through the cars, heard a brief lecture in each and looked over the exhibits. One car would be devoted to tree culture, another to live stock, a third to grains.

This custom began in the West and worked its way eastward. It may turn out that the same process was followed in the case of "health trains." But so far as we know Florida is the first State to apply the method to the education of the public in matters of sanitation and hygiene. The Medical Record gives an account of this work as it is being done in the far South. It consists of warnings against flies and water contamination, directions for the care of children and emphasis on other vital matters. A moving picture apparatus in the car projects wisdom for the crowd upon a screen erected outside.

The car service is supplemented by posters and newspaper articles supplied to the towns throughout the State. Florida has had an unusual number of preventable deaths, and she is going at the work of reduction in earnest. Of course it is chiefly in the country districts that such a campaign by rail counts. No doubt other parts of the country might profitably adapt it to their local needs.—New York Sun.

INTELLIGENT WORK AGAINST MOSQUITOES

The Metropolis is publishing on this page today an interesting communication from the secretary of the Pensacola Civic League relative to its investigation regarding the efficacy of bats as mosquito-destroyers. It seems that there are a number of drawbacks to the bat-rookery plan, and the League has come to the sensible conclusion that the best way to eradicate mosquitoes is to destroy their breeding places, a work that is entirely practicable with the present-day knowledge of the habits of the insects.

With a proper appropriation from the city council, the Miami board of health can put a system into effect that will do away with most of the mosquitoes, and as the progress work of the city continues—the filling in of low places and the proper drainage of others—the only chance for mosquitoes to breed will be on premises of careless people who permit water to stand, unscreened.

Millions of mosquitoes can be hatched in a pint of water standing in an old tin can, and many a family is maintaining a nuisance by permitting cans to remain where the insects can breed; but this, too, is something the board of health can remedy by careful inspection work.

Nor are mosquitoes the only pests that should be handled by destroying their breeding places. Flies are even more dangerous, and places where flies are permitted to live are more of a menace than any mosquito hatchery. The Miami board of health has done a commendable thing in offering a reward for dead flies, but we are tempted to suggest that a reward for the arrest of persons permitting flies to breed on their premises would be more intelligent eradication work.

Go after the places in Miami that have flies. Arrest the restaurant or hotel man or the seller of food, in any form, who permits flies to touch the food he sells or the dishes in which food is served or the scales on which food is weighed, and there will be a far more rapid eradication of the insects than there will be by buying dead flies at so much a pint.

Get rid of the breeding places. Punish the people whose negligence permits flies and mosquitoes to increase in numbers.—Miami Metropolis.

SHOULD NOT RESULT IN PANIC

The epidemic of infantile paralysis in New York has awakened the medical fraternity and health officers generally to the necessity of finding out some way of fighting the disease, of which little is yet known, either as to its cause or cure. Sporadic cases have occurred in various parts of the country in the past, and there was no scare over the fact, and if a case or two appeared in this part of the country now, it would not be surprising and should not result in a panic although precautions advised by the health officers should be read and acted upon by the people of every community. The thing to do is to clean up and keep clean. It is also advisable not only to swat the flies and mosquitoes, but swat their breeding places and reduce their number to a minimum. When people learn to do these things and keep everlastingly at it there will be less disease and consequently fewer funerals.—Bradentown Herald.

FLORIDA LEADS

Florida is ahead of all other States in having the demonstration cars by the State Board of Health, which goes to the smaller towns and communities on the railroads and teaches by lectures and practical demonstration the gospel of health, clean living and prevention of disease.—Ocala Banner.

FORTIFY THE HOME

Fortify the home against the house fly. It is far better to have a screen than a crepe on the door.—Fort Pierce News.

"I AM AN AMERICAN"

I am an American.
 My father belongs to the Sons of the Revolution.
 My mother, to the Colonial Dames.
 One of my ancestors pitched tea overboard in Boston harbor;
 Another stood his ground with Warren;
 Another hungered with Washington at Valley Forge.
 My forefathers were American in the making;
 They spoke in her council halls;
 They died on her battlefields;
 They commanded her ships;
 They cleared her forests.
 Dawns reddened and paled
 Stanch hearts of mine beat fast at each new star
 In the nation's flag.
 Keen eyes of mine foresaw her greater glory;
 The sweep of her seas,
 The plenty of her plains,
 The man-hives in her billion-wired cities.
 Every drop of blood in me holds a heritage of patriotism.
 I am proud of my past.
 I am an American.

—Exchange.

Veterinary Notes

THE STATE VETERINARIAN

The office of state veterinarian is becoming correspondingly important as medical science progresses. As each new veterinary medical or sanitary discovery is put upon a practical basis, the state veterinarian should become acquainted with it and give his State the accruing advantages.

A state veterinarian is to the health of the live stock what a state health officer is to the public health. Each of the two positions should be filled by men specially fitted and adapted to the work of his office. There is as much reason for a state veterinarian being specially fitted and equipped in what goes to make up a practical and scientific medical education as there is for a state health officer to know these things.

The conditions surrounding the office of state veterinarian are fast changing. The time is now here when he is appointed for what he has done in the past, and what that past promises for the future, in scientific work, and not for the work he has done, or may do at the polls. The live stock industry is advancing so rapidly that more than mere ability to dress well and be a good "mixer" is demanded. Both these attributes are pleasant and to be desired, but the times demand, principally, a man of ability. He should have a thorough knowledge of all the contagious and infectious diseases of animals. He should be sufficiently well grounded in bacteriological and pathological technique to make an investigation, in a laboratory. He must also be a practical veterinarian, so as to be able to differentiate the diseases, and thus save much valuable time and expense. The man who would require a week to determine the nature of a disease by bacteriological methods, when, were he a practical veterinarian of experience, he could have made a diagnosis at his first visit, would be of little use to the State.

The state veterinarian should be a man who could inspire the confidence of the veterinary profession in his State, as there are times when he is called to act as referee, or in consultation, or has to pass upon the correctness of the diagnosis of other veterinarians.

The times, especially in the Southern States, are demanding state veterinarians with executive ability, a knowledge of men, and how to handle them with the least friction, in order to expedite work.

Many sanitary laws are lacking in elements of strength. Hence, there are times when public opinion can be enlisted for or against a condition. The veterinarian must be a man of sufficient breadth of view to recognize the situation and make the most of it for all concerned. For instance, it is no easy matter, in a State where there is no law to compel an owner to destroy a glandered animal, without compensation, to get the owner to do so. He may admit the animal is a menace to his neighbors, but fails to see any justice in having asked to sacrifice his property, in what he considers, their interest.

The modern veterinary profession is still so young that there are few, even in the profession who fully understand the scope of the work of a state veterinarian, and it is especially important, therefore, they should be men of wide experience in veterinary work, and thoroughly posted in the latest developments in sanitary, medical subjects, so as to be able to take advantage of the best work that is being done in all parts of the world. He should also be able to originate and enforce new methods that may be indicated by local conditions.

It is generally admitted, now-a-days, that where a state veterinarian has been only a local practitioner without the opportunity for development along the line of state veterinary work, he has either failed as a state veterinarian, or has acquired the necessary experience to do the work of his position at the expense of the taxpayers of his State.

In order for the State to get the position of state veterinarian properly filled, the salary should be commensurate with the importance of the position, so that the incumbent may give his entire time to the duties of his

office. He is then freed from anxiety in providing for his dependents and at the same time is not a competitor for practice. He can thus be on friendly terms with his brother veterinarians and can work with them, and they with him, for the common good.

A CLEAR, GERM-FREE HOG CHOLERA SERUM

Dorset and Henley, of the Bureau of Animal Industry have invented a method of freeing hog blood from the red-blood corpuscles, and bacteria as well, making it possible to produce a clear, sterilized, anti-hog cholera serum having potency or protective properties equal to the so-called bloody serum, which has been in use up to the present time.

In producing this new serum, advantage is taken of the fact that a watery extract of the common, white, navy bean has the peculiar property of agglutinating the red corpuscles of the blood, and further that the addition of common salt adds very materially to the agglutinative power of the bean extract. It is known that ordinary blood is coagulated when heated at 60 degrees C. This clear serum may, however, be heated at 60 degrees C. for 30 minutes without causing coagulation. It is known that the virus of "foot-and-mouth" disease is destroyed by heating at 60 degrees C. for 5 minutes. Inasmuch as it is known that much of the recent "foot-and-mouth" disease in the United States was caused by the use of hog-cholera serum and virus, the above facts are very important, because it is now evident that we have a practical method of sterilizing hog cholera serum of "foot-and-mouth" infection and other diseases as well, by simply heating it at 60 degrees C. for a short while.

After the bean extract (1 per cent) and salt (1 per cent), are added to the hog's blood, from which the fibrin has been removed, agglutination of the corpuscles takes place in about 15 minutes. The mixture is centrifuged for 15 minutes, when it will be found the coloring matter of the blood is thrown to the bottom of the centrifuge cups, in a compact mass, and that the clear serum may be drawn off, placed in containers and sterilized by heat, in a water bath.

All this, of course, would increase the cost of producing serum on a commercial scale; but it is shown by Dorset and Henley that the dose may be reduced to 8 c.c. for a fifty-pound pig, while the dose of the bloody serum is from 20-25 c.c., for a fifty-pound pig.

The yield of bloody serum is from 90 to 95 per cent. The yield of clarified serum is about 75 per cent; so that it would seem this new serum, because of the smaller dose, should really cost no more than the old, bloody serum, and that it has many advantages.

THE UNITED STATES AGAIN FREE FROM FOOT AND MOUTH DISEASE

In the previous number of "Health Notes" we had occasion to call attention to a recrudescence of "foot-and-mouth" disease, in Christian County, Illinois, which county had just a month before been described as free, and as being the last area affected by the disease, in the United States.

Now comes another announcement from the Secretary of Agriculture that the last vestiges of the disease have again been wiped out, and that on May 3, 1916, the order quarantining Christian County, was revoked, and the further announcement that "Foot-and-Mouth" disease does not now exist in the United States.

This is, again, a proof of the efficiency of our method in eradicating a disease, which has stumped all the European nations.

HOW TO FEED BABY CHICKS TO PREVENT LOSS FROM DIARRHEA

Dr. B. F. Kaupp, of the North Carolina Experiment Station, has made some very important experiments showing how feeding may act favorably in controlling this fatal affection in young chicks, which every poultryman knows kills off a large percentage in the first month of life, in many cases.

Two sets of tests were made. The chicks were divided into four sections, as follows: Lot 1, received sour (clabber) milk; lot 2, Bulgarian butter milk; (milk soured by the addition of the so-called Bulgarian tablets; which can be obtained at the drug stores,) lot 3, buttermilk made by additions of ordinary cultures of the lactic acid bacillus, and lot 4, the control lot, received no milk.

The milk for lot 1 was allowed to sour at ordinary room temperature. It was used the next day both for the chicks to drink and for mixing with the feed.

The milk for lot 2 was mixed with a culture of the Bulgarian bacillus, capable of producing a high percentage of lactic acid, in the milk, in 24 hours. It was used for drink and mixing with solid feed.

The milk for lot 3 was mixed with a culture of lactic-acid bacilli of high, acid-producing quality; this also being used for drink as well as being mixed with the solid feed.

Lot 4 was fed a ration containing no milk of any description.

The chicks were housed on premises infected with the germ known to be the cause of chick diarrhea, in order that the experiment might be made under farm or poultry-yard conditions.

All the four lots of chicks developed diarrhea the first week after being taken from the incubator and placed in the infected yards. That the chicks were affected in different degrees of severity, and that the losses varied widely according to the milk rations is shown in the following statement:

Lot No. 1, which received ordinary sour milk to drink, and in the solid ration, were attacked with diarrhea during the first week. Of the 87 chicks under experiment, 16 per cent died during the first four weeks, leaving a percentage of 84 that was saved.

Lot No. 2, which received milk to which Bulgarian tablets had been added, were attacked by diarrhea during the first week. The attack ended by the 14th day. It was mild in character and the chicks were not visibly stunted. The loss was only 10 per cent, 90 per cent surviving.

Lot No. 3, which received milk to which a culture of lactic acid-producing bacilli had been added were attacked with diarrhea during the first week. The attack disappeared by the end of the second week, and no ill-effects were apparent. In this lot 88 per cent survived.

Lot No. 4, the control lot, which received no sour milk, was attacked with diarrhea during the first week. The attack was of great intensity and left the survivors in a wrecked condition. The loss was, at the end of eight weeks, 36 per cent.

DISPOSAL OF DEAD ANIMALS

Often when animals die on the farm no disposal is made of their carcasses other than to drag them into a field or a near-by woods, where they are left on the surface of the ground to decompose or to be eaten by buzzards, crows, dogs and other scavengers, or animals which feed on carrion.

This practice can not be too severely condemned, because it contributes seriously to the dissemination of disease germs and the perpetuation of infectious diseases.

The carcasses of animals which have succumbed to infectious diseases like anthrax, hog cholera, blackleg, tuberculosis, etc., are charged with myriads of virulent disease germs, and just as long as they remain where scavengers can reach them and portions of them can be carried away promiscuously, they are a dangerous menace over a large territory to all animals which are liable to be attacked by disease germs. Even carcasses of animals which have died from other causes than infectious diseases, un-

less they are disposed of in a proper way, are a source of danger. Left on the surface of the ground their odor soon invites scavengers to congregate and to bring with them the infectious material with which they may have become contaminated by eating carrion elsewhere.

Dead animals on the farm should be buried deep enough to prevent them from being dug up again, or they should be burned. To burn large carcasses like those of dead horses and cattle is difficult and laborious and requires a large quantity of fuel. In most instances it is more economical to bury them. All animals which have died of infectious diseases and are buried should be covered with a heavy layer of lime before the graves are closed.

In the winter, when the ground is frozen, it is more difficult to dig graves than at other seasons of the year, but it is just in cold weather that disease germs remain alive and virulent longest in dead organic matter and that scavengers travel the longest distances, have the best appetites, and are most likely to carry disease germs on and in their bodies. The extra trouble of digging graves in the winter is easily offset by the greater danger it counteracts. Low temperature prevents the multiplication of disease germs, but many kinds of disease germs are not killed or deprived of their pernicious possibilities by exposure to a lower temperature than the lowest reached during an icy, arctic winter.

Everywhere farmers not only should attend to the proper and safe disposal of the bodies of their own animals which unfortunately die, but they should insist on the proper disposal of the bodies of all animals which die anywhere in the regions in which their farms are located.—Weekly News Letter, U. S. Department of Agriculture.

Summary of Public Health Administration, June

SOUTHWESTERN DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Inspections by sanitary patrolman as follows: Screening Law—restaurants 7, dining rooms 2, dining or buffet cars 4, kitchens 7, meat shops 3, butcher shops 1, grocery stores 25, bakeries 2, fruit stands 17, ice cream wagons 1, candy kitchens 1. Surface Closet and Water Carriage Laws—private residences 22. Sanitary Nuisance Laws 2. Other laws under jurisdiction of State Board of Health—cigar factories 13. Abatements ordered where violations found. Communicable Diseases—smallpox 1, tuberculosis 4, scarlet fever 4, diphtheria 1; fumigations, releases, etc., 12.

Hillsborough County: Houses inspected in West Tampa concerning sanitary nuisance; letter written to Mayor of West Tampa concerning same. Smallpox case diagnosed and sent to isolation hospital; treatment of case at hospital. Conferences with Mayor of West Tampa on Sanitation and Screening Laws. Inspection of sanitary nuisance complaint at Ballast Point; matter taken up with owner of premises. Interview with Mayor and Council of West Tampa concerning arrangement to be made for milk inspection. Visits to isolation hospital to treat smallpox case.

Lake Thonotossassa: Inspection of school; letter written to trustees of school regarding sanitary measures.

Idle While Park: Inspection of school; letter written to trustees of school regarding improving sanitary conditions.

Plant City: Sanitary inspection of city; inspection of all stores. Conference with city physicians.

Knights Station: Inspection of school; matter of sanitary conditions taken up with trustees of school by mail.

Sarasota: Sanitary inspection of town.

Bradentown: Sanitary inspection of town; inspection of all stores.

Manatee: Sanitary inspection of town; conference with city authorities.

Palmetto: Sanitary inspection of town; inspection of stores for screening law.

Ellenton: Sanitary inspection of town; inspection regarding screening laws.

Parish: Sanitary inspection of town; inspection of school; letters written to trustees of school concerning sanitary measures. Inspection of dumping ground.

Wimauma: Sanitary inspection of school; letters written to trustees of school requesting compliance of sanitary law.

WESTERN DISTRICT

Pensacola: Routine work, office of Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections by sanitary patrolman as follows: Screening Law—hotels 1, restaurants 2, lunch counters 1, kitchens 2, meat shops 1, fruit stands 5. Surface Closet and Water Carriage Laws—private residences 6. Sanitary Nuisance Laws—hogs in pen 2. Abatements ordered where violations found. Communicable diseases—typhoid fever 2, tuberculosis 3; fumigations, releases, etc., 3.

SOUTH TROPIC DISTRICT

Key West: Routine Work, office of Assistant to the State Health Officer. 1,125 injections of typhoid vaccine given. Investigation of complaints and several nuisances ordered abated. Supervision of inspections by sanitary patrolman. Routine laboratory work.

Ft. Lauderdale: Conference with Mayor and City Council relative to enforcement of sanitary surface closet law.

Homestead: Inspection of new toilet system which is being installed. Interview with chairman of sanitary committee and recommendations given.

SOUTH CENTRAL DISTRICT

Ocala: Routine work, office Assistant to the State Health Officer.
 Floral City: Investigation reported case of cholera; found to be dysentery.

Inverness: Sanitary inspection; recommendations regarding sanitary privies.

Dunnellon: Sanitary inspection; talks with city authorities regarding screening of surface closets.

Crystal River: Sanitary inspection of town.

Umatilla: Sanitary inspection of town.

CENTRAL DISTRICT

(Leave of absence during June, Assistant to the State Health Officer).

EAST COAST DISTRICT

(Leave of absence during June, Assistant to the State Health Officer).

WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer. Sanitary inspection of Tallahassee. Inspection of grocery stores, etc., in connection with screening law. Following communicable diseases found: typhoid fever 5 cases, dysentery 5.

New Port: Inspection of cottages and privies.

Marianna: Conference with physicians and city health officer.

Panama: Sanitary inspection of town; conference with physicians and local health officer.

Millville: Sanitary inspection of town; conference with physicians.

St. Andrews: Sanitary inspection of town; conference with local health officer.

Lynn Haven: Sanitary inspection of town; conference with local health officer.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during June: St. Cloud, Kissimmee, Orlando, Sanford.
 Total number towns visited January 1 to July 1, 1916.....121

PUBLICITY AND PUBLICATIONS

Monthly Bulletin "Health Notes," Vol. XI, No. 4, June, 1916, pp. 52. Press service bulletins to Florida newspapers: June 7, "Money Value of Babies;" June 14, "Rip Van Winkle;" June 21, "Cooperation;" June 28, "District Nurses."

Publications out in June: None.

Distribution of literature during June:

Mailed upon request.....	2,137
Press service bulletins to Florida newspapers (4 issues).....	1,100
Health Notes, June, mailing list.....	10,300

Total number pieces distributed..... 13,537

Number pieces literature distributed January 1 to July 1, 1916.....109,647

SMALLPOX

Reported cases of smallpox in Florida, June, 1916:

Jacksonville, Duval County.....	1
Tampa, Hillsborough County.....	1
Worthington Springs, Bradford County.....	1
Total	3
Total number cases reported in 1916 to July 1.....	87

DISTRICT TUBERCULOSIS NURSE INSPECTION

Residence of Cases Visited to Date by Districts	Total Number Patients Under Instruction Last Report	New Cases Found Month Ended	Cases Found % to Have Died	Cases Removed	Cases Apparently Cured	Total No. Patients in District Under Instruction to Date	Total No. of Patients Following Instruction
Western	175	2	1	1	1	111	60
Southwestern	205	16	3	5	5	213	140
North Central	267	..	..	..	..	267	202
West Central	201	14	..	3	..	207	117
East Coast	320	25	8	18	1	318	318
Total for State.....	1,108	62	19	27	8	1,116	837

BIOLOGICAL PRODUCTS

Distribution of Biological Products during June (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only)

Number of Persons Receiving Treatment:

County and Town	Anti-Smallpox Vaccine	Anti-Rabic Vaccine	Anti-Typhoid Vaccine	Diphtheria Antitoxin Curative and Immunizing	Tetanus Antitoxin Immunizing
ALACHUA					
Gainesville	10	..	..	..	..
Newberry	10	..	..	..	..
BREVARD					
Melbourne	10	..	..	..	..
CITRUS					
Inverness .....	..	1	..	..	..
COLUMBIA					
Fort White .....	..	3	..	..	..
DUVAL					
Jacksonville	98	..	36	4	1
ESCAMBIA					
Pensacola .....	..	..	..	2	..
GADSDEN					
Quincy .....	..	..	23	1	..
HILLSBOROUGH					
Tampa	50	..	..	..	..
MADISON					
Madison .....	..	..	..	1	..
MARION					
Ocklawaha	2	..	..	..	..
MONROE					
Key West .....	..	..	236	1	4
PINELLAS					
Tarpon Springs .....	..	..	7	..	..
SAINT JOHNS					
St. Augustine	140	..	..	1	..
SEMINOLE					
Sanford	20	..	..	..	..
VOLUSIA					
New Smyrna	50	..	..	..	..
WALTON					
DeFuniak Springs .....	..	..	5	..	..
Total	390	4	307	10	5

Total number persons receiving anti-smallpox vaccine in 1916 to July 1.....	3,651
Total number persons receiving Pasteur treatment in 1916 to July 1.....	23
Total number persons receiving anti-typhoid vaccine in 1916 to July 1.....	456
Total number persons receiving diphtheria antitoxin in 1916 to July 1.....	63
Total number persons receiving tetanus antitoxin in 1916 to July 1.....	0

CRIPPLED CHILDREN

NAMES	In St. Lukes 6-1-16	In Brewster (Col.) 6-1-16	Outside Treatment 6-1-16	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment	Examined, not Admitted	Total Cases During Month	Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment July 1st, 1916
F. P.	1								1	Daily Dressings		Tbc. Spine	1
H. M.	1								1	Daily Dressings		Tbc. Ilium	1
W. W.			1						1			Polio. Paralysis	1
B. K.	1		1		Tenotomies and Osteotomies left 10th				1	Right Cast removed 7th, Adhesive Massage & Exercise		Club Feet	1
R. W.	1								1	Dressing		Deformity Spastic Paralysis	1
O. D.	1								1	Daily Dressings		Tbc. Spine	1
F. B.		1							1			Ankylosis Knee	1
A. P.	1								1	Daily Dressings		Osteomyelitis	1
H. R.		1							1			Tbc. Hip	1
L. S.	1								1	Cast 6th		Polio. Paralysis	1
C. D.	1								1		Died 6th	Brain Tumor	
D. M.	1								1	Tenorrhaphy and Osteotomy, left 6th, Cast 7th		Paralysis	
												Club Feet	1
	9	4							12		1		11

BACTERIOLOGICAL LABORATORIES
SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Total
Animal Parasites	219	99	28	1	7	354
Diphtheria	82	38	8	..	4	132
Gonorrhoea	81	41	39	1	11	173
Malaria	240	153	33	1	20	447
Pathological	14	3	3	..	..	20
Rabies	15	..	1	..	..	16
Tuberculosis	149	90	39	3	13	294
Typhoid	256	138	36	..	23	453
Water: Bacterial Ex.	54	10	3	..	19	86
Wasserman	300	95	16	..	13	424
Miscellaneous	42	10	8	4	115	179
	1,452	677	214	10	225	2,578

Total number of specimens examined by the Laboratories of the State Board of Health of Florida, during June, 1916.....2,578

Tallahassee Laboratory closed during June.

DISTRIBUTION OF DISEASES DETERMINED BY BACTERIOLOGICAL
LABORATORIES, JUNE, 1916

—MALARIA—

TOWN	Diphtheria	Gonorrhoea	Estivoautumnal	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Tapeworm	Ascariis	Trichinuris	Oxyuris	Rabies	Wassermann	Amoeba	Leprosy
Apalachicola							1	1									
Arcadia							1		2								
Archer									1								
Avon Park									1								
Bartow									1								
Blitchton							1		1								
Bowling Green																	
Boynton	1																
Bradentown								1	6								
Bronson							1										
Caryville		2						1									
Cedar Key								1									
Century																	
Chattahoochee																	
Citra		1						1									
Clearwater		1															
Dade City							1										
DeFuniak Springs								1	1								
Fernandina		1															
Ft. Lauderdale							2										
Ft. Meade									1								
Ft. Pierce								1									
Ft. White									1								
Gainesville							2										
Graceville									2								
Green Cove Springs								1									
Gradin									2								
Hilliard									1								
Inverness														1			
Jacksonville	7	22			6	3	4	19	22	1	1	5	1	3	74		
" Release Cult.	6																
Jasper							1	1									
Key West	1																
Kissimmee									1								
Lake Butler									3								
Lamont														1			
Leesburg									2								
Live Oak								2	1								
Lynn Haven								1									
Madison								1									
Manatee							1										
Mandarin									3								
Marianna							2										
Melbourne									1								
Miami	1	3					3	2					1		4		
Miccosukee									1								
Milligan									1								
Monticello									1								
Mulberry																1	
New Smyrna								1									
Nichols								1									
Ocala									1								
Okeechobee									1								
Orlando		2			1		1	1	4								
Oxford									4								
Palmetto								1									
Panama City							1		1								
Pensacola		8					1	2	10	6							
Perry								1									
Plant City		1			1		2		1						2		
Punta Gorda							1										
Quincy		1															
Safety Harbor		1															
San Antonio									1								
St. Andrews									1								
St. Augustine								2									
St. Petersburg									2	1							
Sanford								2									
Sebastian									3								
Sneads			1				1		2								

(MALARIA)

TOWN	Diphtheria	Gonorrhoea	Estivoautumnal	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Tapeworm	Ascaris	Trichinris	Oxyuris	Rabies	Wassermann	Ameba	Leprosy
Starke .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Stuart .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Sutherland .....	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..
Tallahassee .....	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..
Tampa	2	9	..	..	2	..	5	12	8	1	7	6	..	..	25	5	..
Venice .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Wauchula .....	..	..	..	..	..	..	3	..	1	..	..	..	..	..	..	..	..
Wellborn .....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
West Palm Beach ..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..
West Tampa .....	..	..	..	..	..	..	..	..	..	..	1	3	..	..	..	..	..
Williston	1	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..
Winter Haven .....	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..
Zolfo .....	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Total.....	19	52	1	..	10	4	43	69	100	3	10	15	2	5	109	5	1

BUREAU OF VETERINARY SCIENCE
TICK ERADICATION

Cattle dipping vats reported constructed during June, 1916:

Hamilton County	1
Jackson County	1
Escambia County	13

Total number of vats reported constructed to July 1, 1916.....115

GLANDERS

Diagnosed by Veterinarian during June, 1916:

Jacksonville, Duval County.....	2 horses, \$150.00
Jacksonville, Duval County.....	1 mule, \$ 75.00
Total number of cases in 1916, to July 1.....	9

IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 31; Mules, 21; Cattle, 36; Hogs, 54.....142

EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 15; Mules, 4; Hogs, 2; Sheep, 397.....409

INTRASTATE SHIPMENT OF CATTLE TO DADE COUNTY

Cattle18

HOG CHOLERA SERUM DISTRIBUTED JUNE, 1916

	C. C. Serum Distributed
Alachua	11,750 c.c.
Baker	c.c.
Bay	750 c.c.
Bradford	11,650 c.c.
Brevard	c.c.
Broward	c.c.
Calhoun	10,500 c.c.
Citrus	2,900 c.c.
Clay	1,600 c.c.
Columbia	700 c.c.
Dade	c.c.
DeSoto	2,500 c.c.
Duval	3,000 c.c.
Escambia	10,000 c.c.
Franklin	c.c.
Gadsden	7,400 c.c.
Hamilton	4,000 c.c.
Hernando	1,000 c.c.
Hillsboro	6,000 c.c.
Holmes	20,550 c.c.
Jackson	17,400 c.c.
Jefferson	10,800 c.c.
Lafayette	1,300 c.c.
Lake	c.c.
Lee	c.c.
Leon	3,700 c.c.
Levy	4,150 c.c.
Liberty	650 c.c.
Madison	12,350 c.c.
Manatee	350 c.c.
Marion	7,950 c.c.
Monroe	c.c.
Nassau	c.c.
Orange	1,000 c.c.
Osceola	150 c.c.
Palm Beach	c.c.
Pasco	1,000 c.c.
Pinellas	c.c.
Polk	2,500 c.c.
Putnam	c.c.
Santa Rosa	8,100 c.c.
Seminole	c.c.
St. Johns	c.c.
St. Lucie	c.c.
Sumter	c.c.
Suwanee	2,200 c.c.
Taylor	c.c.
Volusia	c.c.
Wakulla	c.c.
Walton	6,650 c.c.
Washington	11,960 c.c.
Total	197,200 c.c.
Serum sold	2,000 c.c.

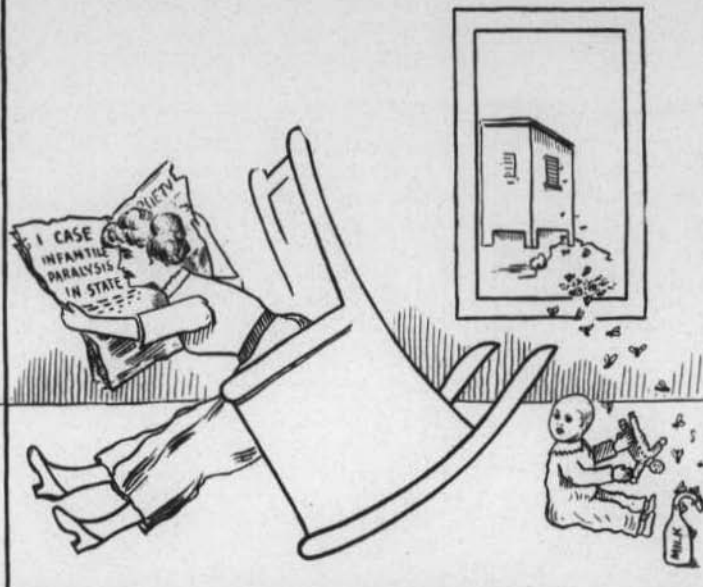
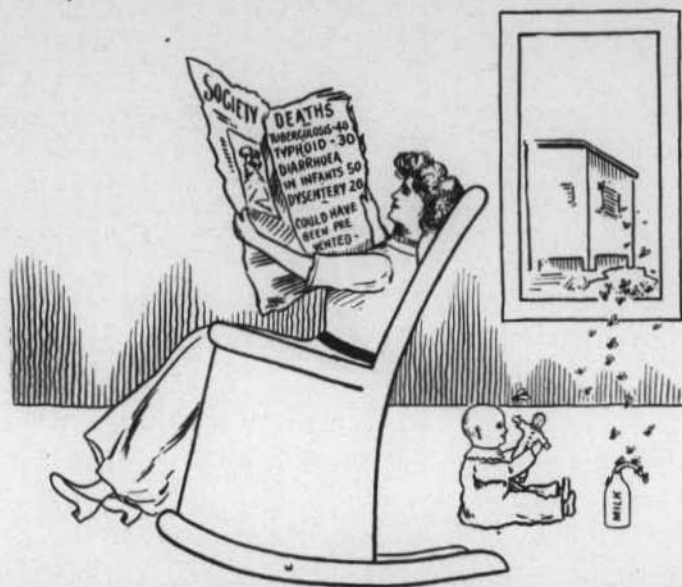
Estimated number of hogs treated, June	8,963
Estimated weight of hogs treated, June	526,743 lbs.
Amount of hog-cholera serum purchased during June	200,000 c.c.
Cost of serum purchased during June	\$1,500.00
Estimated number of hogs treated in 1916, to July 1	
Estimated weight of hogs treated in 1916, to July 1	
Cost of serum purchased in 1916, to July 1	\$7,000.00

VETERINARY INSPECTIONS FOR THE MONTH OF JUNE

June 1-2, Milton and Jay, vaccinated 341 head of cattle with second dose of anthrax vaccine; June 3rd, Wacissa, stomatitis in a mule; June 2-5, Gainesville, testing dairy cattle for tuberculosis; June 4-5, Jacksonville, 18 head cattle dipped and tested for tuberculosis for shipment into Dade County; June 5-6, Kissimmee, investigating sheep disease; June 5-7, Tallahassee, tick fever; June 7-9, Leesburg and Fruitland Park, supervise construction of dipping vat; June 8, Tallahassee, vaccinated 63 head of cattle with second dose of anthrax vaccine; June 8-11, 13-15, Tallahassee, tick fever; June 15-17, Eustis and Montverde, supervision of construction of dipping vat; June 19th, Evinston, investigation of glanders (negative); June 21-22, Orlando, investigating hog disease (cholera); June 20, Jacksonville (near), testing new cattle dip; June 25, Ellaville, tick fever; June 26-27, Providence, investigating cattle disease (tick fever); June 27, Jacksonville, condemned two horses for glanders and disinfected stables; June 30, Kissimmee, 397 sheep inspected for scab; June 30, Jacksonville, condemned one mule for glanders and disinfected stables. Vat construction in Escambia County, 30 days' services. Inspections of quarantined cattle in Dade and Broward Counties, 9 days.

INCONSISTENCY-

If people were as much interested in the common PREVENTABLE diseases as they are in infantile paralysis at the present time, the appalling death rate of children would be quickly reduced.



MANY DEATHS FROM PREVENTABLE DISEASES
ARE AN EVERY-DAY OCCURRENCE

BUT

"HORRORS" - ONE CASE OF
INFANTILE PARALYSIS IN THE STATE!

RR



Bureau of the Public Health Service
SEP 29 1916
Health Service

HEALTH NOTES

OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

STATE BOARD OF HEALTH

ENTERED AS SECOND CLASS MATTER, FEBRUARY 17, 1915
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Vol. XI

August, 1916

No. 8 (New Series)

HON. FRANK J. FEARNSIDE, President
 Palatka, Fla.

HON. S. R. MALLORY KENNEDY, M. D.
 Pensacola, Fla.

HON. C. G. MEMMINGER
 Lakeland, Fla.

EDITED BY
 JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

EXECUTIVE OFFICE
 State Board of Health Building, Springfield Boulevard
 Jacksonville

BRANCH OFFICES

ASSISTANTS TO THE STATE HEALTH OFFICER

Tampa	Key West	St. Augustine
Pensacola	Gainesville	Ocala

AGENTS

Miami	Fernandina	Palatka
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BACTERIOLOGICAL LABORATORIES

CENTRAL LABORATORY

Jacksonville

BRANCH LABORATORIES

Tampa	Pensacola	Miami
Tallahassee	Key West	

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

Geddings, Dr. H. D.,
 c/o U.S.M.H. Serv. Per.

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.
- Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.
- Publication 158, Malaria, April, 1916, pp. 4.
- Publication 159, Some Poultry Pests, April, 1916, pp. 10.
- Publication 160, Annual Report State Board of Health of Florida, April, 1916, pp. 256.
- Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).
- Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.
- Publication 163, Hog Cholera, pp. 30.
- Publication 164, Annual Report of Veterinary Department, 1915, Reprint from 27th Annual Report of the State Board of Health, April, 1916, pp. 56.
- Publication 165, Annual Report of Crippled Children Treatment, 1915, Reprint from 27th Annual Report State Board of Health, April, 1916, pp. 6, illustrated.
- Publication 166, Vital Statistics, 1915, Reprint from June, 1916, Health Notes, pp. 44.
- Publication 168, "A Health Sermon," Reprint from June, 1916, Health Notes, pp. 6.

BEAR IN MIND

That dirty milk kills more babies every year and every day in the year than does INFANTILE PARALYSIS.

That Nature's way of raising babies is the best and can't be improved upon even if it does inconvenience fashionable mothers, but if the baby has to be artificially fed, and the milk is at all of doubtful quality, PASTEURIZE it before feeding to the baby.

That if you do not know how to pasteurize milk write to the State Board of Health and full directions will be promptly and cheerfully given—and by return mail.

That carelessness and indifference in the care of premises are productive of two things: furnishing a fruitful soil for disease agencies to thrive in, and a slothful householder or community.

That what should concern you is the condition of your own premises and not your neighbors. "Mind your own business" is as applicable a maxim in sanitation and cleanly living as in commercial life.

That a dirty refrigerator and careless jumbling of fruits, milk, shellfish, meats and partially-cooked food can cause an acute case of old-fashioned cholera-morbus, now designated by the more elegant term, "ptomaine poisoning."

CLEAN HANDS

Disease germs lead a hand to mouth existence. If the human race would learn to keep the unwashed hand away from the mouth many human diseases would be greatly diminished. We handle infectious matter more or less constantly and we continually carry the hands to the mouth. If the hand has recently been in contact with infectious matter the germs of disease may in this way be introduced into the body. Many persons wet their fingers with saliva before counting money, turning the pages of a book, or performing similar acts. In this case the process is reversed, the infection being carried to the object handled, there to await carriage to the mouth of some other careless person. In view of these facts the U. S. Public Health Service has formulated the following simple rules of personal hygiene and recommends their adoption by every person in the United States:

WASH THE HANDS IMMEDIATELY

Before eating.

Before handling, preparing or serving food,

After using the toilet.

After attending the sick, and

After handling anything dirty.

WILL GIVE FREE ADVICE ON TUBERCULOSIS

Free expert advice for consumptives and others interested in tuberculosis is given in a pamphlet just issued by The National Association for the Study and Prevention of Tuberculosis, entitled "What You Should Know About Tuberculosis."

The pamphlet was prepared by a committee of experts of international prominence consisting of Dr. Charles L. Minor of Asheville; Dr. David R. Lyman of Wallingford, Conn.; Dr. H. R. M. Landis of Philadelphia; Dr. John H. Lowman of Cleveland, and William H. Baldwin of Washington. It contains the latest and most authoritative information about tuberculosis.

It deals with the nature of the disease; how infection may take place; how the disease is cured; how the family may be protected; what the patient may do after discharge, and how the disease may be prevented in the community.

A copy of the pamphlet will be sent free to anyone applying for it at the office of The National Association for the Study and Prevention of Tuberculosis, 105 East 22d Street, New York, or at the office of his own state or local anti-tuberculosis association, or board of health.—*Press Service, The National Association for the Study and Prevention of Tuberculosis.*

Editor's Note: (The above pamphlet has been published by the State Board of Health of Florida, and may be had free of charge by applying to the State Health Officer at Jacksonville.)

WHAT IT COSTS TO BE SICK

A committee which has been for several years engaged in gathering information concerning the time lost by workmen through sickness has recently made a report according to which each one of the 30,000,000 wage earners of the United States loses annually nine days' time from illness. In addition there is an expenditure of six dollars per capita for medical treatment, a total loss through sickness of \$500,000,000.

An examination into the causes of sickness showed that almost all were preventable; the chief causes being errors in diet, the use of alcohol, tobacco, unventilated living rooms, dusty, dark, unventilated factories and workshops.

The committee was of the opinion that proper living that would bring about a reform in habits and living conditions would easily reduce the cost of illness to one-tenth the present sum, as wage earners for the most part are able-bodied men and women. The committee believes further that compulsory health insurance similar to that adopted in Great Britain last year would also be an effective remedy in reducing the cost of illness.—*Press Service North Carolina State Board of Health.*

CORRECT LIVING

What profiteth a man that he gain the whole world yet lose his health?

Naturalists say that long ago the prehistoric waters were infested with a species of enormous shark which finally became extinct by reason of the workings of its voracious appetite. Thus Nature eliminates the over-fed.

The desire for ease of life and plentiful diet is universal and is the great stimulus of man and animals alike. When man becomes greedy and takes more ease and food and drink than is his share, Nature discards him.

In the race for power and place, for ease of circumstance and relief from the stimulus of hunger, the modern man is apt to forget that unless he is careful of his body he will soon be made to suffer for the infraction of Nature's inexorable physical law. With the loss in body tone comes an equal loss in mental acuity and the brain which for a time was able to operate despite the complaints of an over-fed, under-exercised, self-poisoned body, stops working.

Statisticians have discovered that the mortality rate of persons in the United States over 45 years of age is increasing. The strenuous life of today is not alone responsible for this. Lack of health-giving exercise, superfluity of diet, lack of restoring sleep, over-stimulation, the high pressure of the race for power, wealth and position, plus physical neglect,—these bring early decay. The goal is reached,—wealth is amassed,—honor, position and power are just being grasped when the apple of accomplishment turns to the ashes of dissolution. The brilliant mind becomes clouded, the steady hand is no longer accurate, the eye which once gazed fearlessly on the whole world is dimmed and it is not long before the final break-up occurs. All of this was entirely preventable.

Other things being equal it is the man who leads the well-balanced life who lasts the longest, whose work to the end is uniformly the best, he who neither over-works nor over-plays, neither over-eats, over-drinks, nor over-sleeps, he who maintains a standard of simple healthy diet in moderation, who offsets mental work with physical recreation, who is as honest with his own body as he is with his own business. When success comes to such an one his physical and mental condition is such that he can enjoy in peace of mind and contentment of body the fruits of his labors.

The regulations of U. S. Public Health Service state: "It is the duty of officers to maintain their physical as well as their professional fitness. To this end they shall be allowed time for recreation and study whenever their official duties will permit." If the government regards it as essential that its sanitary experts shall be safeguarded in this way, is it not equally important to every citizen that he similarly maintain a high standard of physical integrity?

Health Briefs

Sedentary habits shorten life.

Cockroaches may carry disease.

Better wages make better health.

Better health makes better citizens.

Hookworm enters through the skin.

Better citizens make a better nation.

Pneumonia is a communicable disease.

The breast fed baby has the best chance.

Many a severe cold ends in tuberculosis.

Tuberculosis and poverty go hand in hand.

Heavy eating like heavy drinking shortens life.

Physical fitness is preparedness against disease.

Scarlet fever kills over 10,000 Americans each year.

Cholera is spread in the same manner as typhoid fever.

Intelligent motherhood conserves the nation's best crop.

He who builds up health lays up treasure in the Bank of Nature.

The hand that carries food to the mouth can also carry disease germs.

Neglected adenoids and defective teeth in childhood menace adult health.

The registration of sickness is even more important than the registration of deaths.

The U. S. Public Health Service will send a booklet on flies and disease, gratis to all applicants.

The U. S. Public Health Service cooperates with state and local authorities to improve rural sanitation.

The U. S. Public Health Service found 78 per cent of the rural homes in a certain county unprovided with sanitary conveniences of any kind.

Correspondence

SOMEWHERE IN FLORIDA

Not-a-Military Camp, Aug. 10, 1916.

Dr. J. Y. Porter, care State Board of Health, Jacksonville, Fla.

Dear Doctor: You should hardly be expected to know just how few bi-peds in these U. S., who realize that "No Man Liveth Unto Himself" or just what number of them, (we are told, are made in His own image), who have at some time in their lives, read in the "Good Book" these words, "Be sure your sin will find you out."

But perhaps the following will be of interest: Many years ago, it was discovered that by going so many feet below the surface, one could find a very important chemical. Some years later, it developed that said chemical could be had in great quantities, a few feet under the surface of certain parts of our peninsular soil. So from time to time, new mines have opened up, and miners of all shades and colors being employed by these mining companies. New towns and villages grew up. There being no sanitary rules or regulations in these cosmopolitan camps, located on low prairie lands, the miners being required to toil two weeks night and two weeks day shifts, seven days in the week, the death rate compared very favorably with that of the first body of men, who attempted to dig the Panama Canal. A hint to protect the miners against the bite of mosquitoes was laughed at, by those in position to aid these poor illiterate devils; so long as the General Manager, Superintendent and office force were living in screened quarters, what difference did it make, as to how many sickened and died, those in authority not having been schooled in "Enlightened Selfishness." All this in spite of the fact that these mines are owned and operated by intellectual gentlemen, residing in Boston, Mass.,—millions being invested. Naturally physicians drifted into this section, from different sections of the country; most of them young men, without families, finding it easy to secure horse and buggy from local liverymen, in exchange for their note, doing a lucrative business from the start. Whiskey flowing freely, white men financing negro joints, erecting quarters and renting same at figures that netted tempting profits. Finally one of the several physicians, who had drifted from a colder climate, hearing of certain turpentine camp operators letting the practice to doctors on a compulsory contract basis (of course it goes without saying, a physician engaged in such compulsory work is deprived of all affiliation with all doctors engaged in ethical practice), in spite of admonishments from his brothers, this doctor financier becomes a stockholder in an undertaking establishment, and picks himself a mine employing some 1,200 or 1,400 souls, and invites the G. M. to dine. Late in the evening, a proposition is made said G. M. that he is to collect through the office, from each bi-ped, \$13.00 per annum, payable 50 cents each two weeks; same to be made compulsory by order of the G. M. \$13.00 each from 1,400 laborers; pay or get off the job. Their children have to eat? No job, no food. $\$13.00 \times 1,400 = \$18,200.00$ per annum, very tempting. If he could only hold this cinch for three years, he didn't care a d— what the profession or the people thought of him. ("Ish ca Bibble")

In the meantime, a number of negro shacks were constructed renting for \$2.00 per week each. Two or three of the physicians, with their wives and children move away, merit counting for little, with 80 per cent of the work controlled by giving service to the G. M. and office force. As time moves on, this noted doctor becomes a democratic mayor, and a republican P. M. Uncle Sam wasn't fooled but a few weeks, soon firing him out. But why should he worry; his assistant is now a councilman, and his renting agent is mayor of the town. A few years ago, this boss wanting a private bath, bonds were issued for purpose of installing sewerage. It was announced that same would be made compulsory, all residents being ordered by the Hon. Mayor to install sewerage. In the meantime a secret caucus

was held, and it was decreed, that owing to the fact the war had brought about a general business depression, landlords would not be required to install sanitary closets. The more progressive home owners, in the meantime had installed plumbing fixtures, and connected up with the city mains. More than two years have transpired since this famous proclamation was issued to a favored few. This honorable mayor, by his action, for past two years has said "As for me and my house, and all these houses I let, netting my boss several hundred dollars per month, will go it in the primitive fashion, that was good enough for Pa." An enterprising citizen estimates that this special privilege act, cuts down the water works revenue more than one-third. (This goes on in spite of the fact that the town is in need of larger mains, and is badly in debt.) Now as a town is just as sanitary as its most filthy citizen, and as the well meaning citizens are in the minority in voting strength, being unable to even vote the cows and other quadrupeds off the streets, their little children liable to contract dysentery, tuberculosis, infantile paralysis, etc. (this being a cosmopolitan town, as the people move away, more are imported), from contact with the flies, that while hatched and grown under the closet of this honorable mayor, aren't any too fond of staying home, his house being near the center of the town. (We are told that there are no secrets on earth).

As I have outlined the more important signs and symptoms of this town, you will greatly favor a number of its home-owning citizens, by offering either palliative or curative treatment.

Yours in the interest of humanity,

"A FLORIDA CITIZEN AND FATHER."

INFANTILE PARALYSIS AND OTHER COMMUNICABLE DISEASES

Jacksonville, Fla., Aug. 8, 1916.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: I am writing you for information and advice. I have two babies in my family, and of course desire to prevent their being exposed to any contagious disease. I notice from the papers that the great infantile paralysis epidemic raging in the North is already pretty well scattered over South Carolina, and I have heard that it was still nearer Jacksonville, if not already here. Would it be advisable, under the circumstances, to send my family to the country; that is, I naturally suppose they would not be as likely to come in contact with the disease, but would the country doctors have the same means of taking care of them in case they should show any signs of it as would the doctors here? I am afraid not. Another thing, our roomers have gone to South Carolina on vacation. They have no children. Is it possible for adults to carry the disease from one child to another? The above subject is giving me a great deal of concern here of late, as well as thousands of others, I suppose, and I would appreciate any advice or suggestions from you. Thanking you for a reply, for which I enclose postage, I am,

Yours respectfully,

Jacksonville, Fla., Aug. 10, 1916.

Dear Sir: I have your letter of the 8th requesting advice relative to the presence of the epidemic of infantile paralysis, which is now raging in New York and other points to the North. There have, up to the present time been no case reported in Jacksonville, and I see no occasion whatever to send your children to the country. It is a regrettable fact that an outbreak of the more uncommon diseases calls forth a spirit of alarm and hysteria on the part of the public which is out of all proportion to the actual danger; while hundreds of cases of the more common communicable diseases, such as diphtheria, measles, whooping cough, may occur and pass almost un-

noticed, though, in reality, they are responsible for many more deaths than the rare diseases which occasion so much alarm. A very careful inspection service is being maintained by the State Board of Health and all children arriving in Florida from any point where the infection is known to exist, or any children showing any temperature upon arrival here, are kept under observation for a sufficient period of time to insure the prompt detection of any suspicious symptoms which may occur. I believe there is very little if any danger of transmission of the disease indirectly by means of a third person. The great majority of all cases of communicable disease, and I believe this is no exception to the rule, are contracted through direct contact with a patient suffering with the disease, or with the secretions or discharges from such a patient. In view of these facts, I feel no hesitancy in saying I believe your children will be just as safe, and possibly safer, right here in Jacksonville than they would if removed to some other point where they would probably not be within reach of efficient medical attention.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

INDIGENT PELLAGRA CASE

August 25, 1916.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: We desire your interest and assistance in regard to a pellagra case in our midst. The mother died recently of pellagra, and now the father has it, according to the diagnosis of the attending physician. The Woman's Club has been assisting the family; also churches and individuals. There are five small children from one year to eight, apparently healthy now, and the father consented to their being sent to the children's home, but later refused to part with the children. We do not know what to do. The doctor says if the children remain there they will probably get it. The traveling nurses of the State Board of Health visited these cases. Can you do anything to safeguard the children and community? Can you tell us anything to do to relieve the situation and save the children?

Yours very truly,

Jacksonville, Fla., August 26, 1916.

Dear Madam: I have your letter of the 25th, and regret exceedingly that I see no feasible plan by which the State Board of Health could be of monetary assistance in the present instance. It is impossible, of course, for this Board to render financial aid in cases of this kind, and as the care of the indigent sick is strictly a local or county problem, just as in the case of other paupers there is nothing this Board could do in the premises. Pellagra is not a communicable disease, though in the light of recent experiments it appears that it is preventable by the use of proper diet. If the father refuses to part with the children, it is impossible to force him to do so. The State Board of Health will be glad to furnish whatever assistance it may by having the district public health nurse visit this family at intervals, and instruct them in the proper diet and proper management of this case, and of the children for the prevention of the occurrence of the disease in them. Otherwise, I see no way in which I can be of any assistance whatever in the present case. Assuring you of my appreciation of the interest which you manifest in the cause of public health protection, I am,

Very truly yours,

(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

NO MORE RINSING COLD DRINK CUPS IN COLD WATER

Keepers of soft drink fountains, restaurants and places where drinks are dispensed will have to either provide individual cups or glasses for their customers or else place a sterilizing apparatus behind the counter and sterilize each glass and each spoon before it can be used for a second time, according to an ordinance framed by City Attorney Fred Cason for the City Board of Health. The ordinance was read at yesterday's meeting of the health board, and was sent to the council today with the request from the board that it be passed and made effective as soon as possible.

"This would be one of the best ordinances the city could have," said City Health Officer Edgar Peters. "We have wanted something like it for a long time, and where so many soft drinks are sold it is essential that particular pains be taken to sterilize the glasses, instead of just rinsing them off in a basin of cold water." He said it would be an easy matter for the proprietors to put in a small alcohol lamp, and have a pot of boiling water always on hand where the glasses, ice cream dishes and spoons could be sterilized. This method would probably be cheaper and just as effective as the use of antiseptics, he believes.

The ordinance provides a strict penalty for violation of the provisions. The ordinance reads as follows:

THE PROPOSED ORDINANCE

"Be it ordained by the city council of the city of Miami:

Section 1—That every person, firm or corporation operating or conducting a public drinking stand or a fountain or other place where drinks are served, either free or for a consideration, shall use individual drinking cups or glasses in serving patrons, except in cases where the cups, glass or receptacles so used be washed in boiling water or antiseptic solution after having been used by each individual.

Section 2—That any person, firm or corporation conducting or operating any restaurant, boarding house or hotel shall wash all glasses, dishes, spoons, knives and forks in boiling water, or in an antiseptic solution before such glasses, dishes, spoons, knives or forks shall be used a second time by any patron of such manager or operator.

Section 3—That the kind of antiseptic solution to be used by any firm, person or corporation so as to comply with the provisions of the two foregoing sections, shall be designated by the city health officer upon request. And the use of any antiseptic solution without first consulting the city health officer and obtaining his permission to use the same, shall not be sufficient to operate as an observance of this ordinance.

Section 4—That any person, firm or corporation violating any of the provisions of the foregoing sections shall, upon conviction thereof, be fined not more than \$100 or imprisoned not more than 60 days, or shall be both fined and imprisoned not exceeding said amount and said period, in the discretion of the court."

The ordinance will probably be brought up at the next meeting.—Miami Metropolis.

A REMARKABLE SANITARY RECORD

There is cause for pride in the breast of every patriotic American, and especially cause for a feeling of security among friends and relatives of our soldiers and national guardsmen, in the report of the sanitary department of General Pershing's command, now in Mexico. According to it, the men in that country are actually enjoying better health than the stay-at-home population of the United States as a whole.

This is a remarkable testimonial to the efficiency of our sanitary corps. They have made a most thorough study of preventive measures of most efficacy in the tropics, and their recommendations have been strictly enforced by officers of the line under General Pershing's personal orders. As a result not a single case of typhoid has occurred, and what little illness has resulted has been mostly dysentery, as was to be expected in a country with such impure water supplies. Measures to overcome this trouble are being taken wherever it is discovered, however, and the health of the troops remain as near perfect as can be expected in any large body of human beings anywhere.

Statistics show that the sick rate for the troops in the field is only 1.7 per cent, which is less than half that for the entire country. It thus appears that the boys in Mexico are actually safer from disease where they are than if they were dwelling in a sanitary American city surrounded by "all modern conveniences." This is indeed a contrast with the days of 1898. We have learned much in eighteen years, and that knowledge is being practically applied. The victory already won over sickness is as important as any possible victory to be won over bullets.

BIRTHS AND DEATHS IN ROUMANIA

It is impossible to travel through Roumania without coming to the conclusion that the average Roumanian must be the most superstitious person on earth. Before he is born his mother is hemmed round with all manner of conventions. She may not do this, she may not do that; she may not even steal lest the image of the stolen object should appear on the child's face.

The newly born Roumanian must be bathed immediately in hot water in which a white goose has been dipped. This is a wise precaution, as it makes the child immune to witchcraft. But, after being bathed, on no account must the child be allowed to sleep before a small pellet of wood ashes mixed with saliva is pressed on his forehead to ward off the evil eye. In certain localities, near the Pindos, the Armini people pickle the newly arrived in salt for 12 hours; after which they wash the little body with water and wine.

The new baby's bath water is always poured carefully on the ground within the shadow of the house. The place where it is poured must be perfectly clean, or the fairies will get angry and curse the child with bad luck.

On the evening of the day on which the child is three days old the house door must be locked, and every one must retire to rest at sundown. No one may leave his room or get up before sunrise on any account; nor must a light be shown in any other than the mother's room, for on that night the three fate-bringers will visit the house, and finally decide as to the luck of the child. If they are disturbed in any way they may visit their displeasure upon the child; and some families who keep a dog have even gone to the length of shutting the faithful creature out of doors the night their first born was three days old, lest he should bite the fairies.

Should a mother lose all her children but one through sickness or accident, as soon as the last little victim is buried she will take the survivor, wrapt in a cloak, lay it on the doorstep of the village church, and turn away weeping bitterly. A friend is, however, conveniently at hand who picks up the child and takes it back to the mother. But the mother refuses to consider it as hers, and will only consent to adopt it. This is supposed to break the trail of bad luck, as the evil influence which had compassed the death of the others will be deceived into believing that the surviving child is a founding who has nothing to do with the family it has been persecuting.

A wedding takes three days as a minimum, and is hedged about with restrictions. The food must be prepared in a certain way and cooked in a particular manner, otherwise all sorts of unpleasant fates will await the young couple. All weddings begin on a Thursday, and are not completed by the Saturday, when the couple are brought together for the first time during the ceremony for the feast proper. The preliminary stages of the wedding takes place at the houses of the parents of the bride and bridegroom; the latter part at the home the young people are going to occupy.

As soon as the guests arrive the bride has to throw cold water on them in a literal sense. This she does by means of a spoon, and each drop a guest receives means a blessing. Some guests make a practice of getting as close as possible to the fair sprinkler. As soon as the guests are all assembled feasting commences, and goes on all through the Saturday night and Sunday; and on Sunday the actual wedding takes place. The couple are first married by the Mayor of the village, after which they go to the church for Holy Communion, returning home to the grand feast which concludes the wedding festivities, until the evening of the following day, when they are resumed and more feasting indulged in. The duration of this depends on the good sense of all concerned and the amount of funds that can be got together.

Married life is not according to Western conventions, as it is firmly believed that if a man does not beat his wife he does not love her, and consequently a woman who did not receive an occasional thrashing would begin to seek about for evidence sufficient to justify her applying for a divorce.

On no account must a dying person be allowed to pass away in the dark. He must hold a candle or taper in his hand at the moment of dissolution, as the light keeps away evil spirits who would tamper with his soul, and, in addition, enables his spirit to find its way to heaven. When the dying man has breathed his last the window must be opened instantly, or, failing that, one of the panes of glass or sheets of oiled paper, whichever are used, must be broken, in order that the spirit may pass easily away. The body is then washed reverently in hot water, which is afterward carefully poured at the foot of a tree; his nails are cut and the parings embedded in wax and retained by the relations as keepsakes; and afterward he is dressed in new linen, his best clothes, and a black lambskin hat. For three days candles are kept burning before the corpse; after which the coffin, uncovered, is taken to the churchyard. The reason for its being left uncovered is to enable the dead to take a last look at the world. In certain districts the authorities will not allow interments being made in that manner and the difficulty is got over by putting little windows in the sides and lid of the coffin. After the funeral every one drinks to the future life of the departed, but before doing so is careful to spill a few drops of wine on the ground.—(Old World Chitchat) Cincinnati Enquirer.

LABORATORY HAD A BUSY MONTH

During the month of August, Dr. Herbert R. Mills, bacteriologist at the local state laboratory, made 782 tests and experiments of various kinds. Dr. Mills has made his monthly report, which shows for itself the general healthy condition in and about Tampa.

During the months eighty-seven tests were made for tuberculosis and only fourteen were found positive. One hundred and seventy-five tests for malaria were made and only four of that number were positive. The figures shown by Dr. Mills' report on malaria show a marked degree of healthiness in Tampa. Out of 134 cases examined for typhoid only thirteen were positive. Thirty-seven cases for gonorrhea were examined, which showed an even dozen with positive results. The percentage of the latter disease runs higher than any other in Tampa.

Two cases were examined for leprosy and one case was noted to be positive. Various other examinations and experiments were made by Dr. Mills last month, but all were more or less of minor importance.—Tampa Times.

Sanitary Engineering Notes

On July 1st, of the current year there was instituted as a part of the State Board of Health a Bureau of Public Health Engineering, with a sanitary engineer in charge. This new department was established in order to consult with and advise the authorities of cities and towns and persons having, or about to have, problems confronting them along sanitary lines, in sewerage, sewage disposal, water supply, water purification, refuse collection, disposal, etc., give advice as to the most appropriate source of water supply, and the best method of assuring its purity or as to the best method of disposing of their drainage or sewage with reference to the existing and future needs of other cities, towns or persons which may be affected thereby. It is solely an advisory department at the service of the state—and stands ready to help solve the numerous little problems which may arise from time to time.

In the past there have been cases of unreliable engineering and contracting firms operating in Florida—stepping into towns, taking advantage of the authorities and performing an unworkmanlike execution of their contracts. In many cases loosely drawn specifications are presented, with the ultimate result that the poorest of material is used in construction. In order to check the further actions and proceedings of such unbusinesslike dealers it is earnestly requested that henceforth, should any town, city or village contemplate work along sanitary engineering lines, that such towns, cities or villages invite the advice of the State Board of Health, or in case any engineer or engineers are retained that the plans and specifications of such engineer or engineers be submitted to the Bureau of Engineering for approval.

During the past two months the Bureau of Engineering of the State Board of Health has made sanitary investigations into the water supply, sewerage and sewage disposal systems of ten cities in the state and in each case has rendered opinions and recommendations.

Requests have been received from a number of individuals requesting advice along sanitary engineering lines. Such interest manifested by the citizens of the state is commendable and the Board wishes more of it.

One citizen wrote to the Bureau for an emergency water filter to make his supply "safe and palatable." He received his information a few days later and acknowledged plans. Let all follow suit and soon every supply in Florida will be "safe and palatable."

The Board gives advice on sewerage projects for a house or a city—so do not hesitate to abolish that fly covered, open privy.

Florida needs a state plumbing code to insure reliable work. What is your opinion?

How is the country school in your district? Better see that the privy is in good condition. Write the Board if you need advise. Remember the State Statute on this special subject.

Specimens of water will not be analyzed unless sent to the laboratory in containers furnished free by it, and accompanied by blanks, properly filled, giving the history of the specimen.

THE SEWAGE AND DRAINAGE WELL NUISANCE

By George W. Simons, Jr., S. B., Chief, Bureau of Engineering

Some years ago men confronted by troublesome drainage problems in Florida discovered that deep wells drilled into the ground, at certain spots, were capable of removing the superficial water satisfactorily—thus bringing relief in a simple and comparatively inexpensive manner. In such a way the drainage well realized itself. Later an ingenious individual concluded that if such a well could remove water from a swamp or lowland, it could also convey the sewage from his household or community in a similar way. Consequently the popular and yet undesirable sewage well was promulgated until now sections of Florida are dotted with such untrustworthy methods of sewage disposal. The folly of the method was wisely made evident to the 1913 session of the legislature of Florida which body took definite action against these wells and their further usage.

In central and west central Florida sewage and drainage wells abound in great numbers. In rural communities, lowlands, swamps and ditches are drained into these wells while cities allow their sewage, storm and street washings access to them. One city in central Florida has 65 wells in operation at present, some of which have been serving their vulnerable purpose for over twenty years; simultaneously in west central Florida another city had until recently as many as 150 performing similar functions. Throughout the above named districts the method met with popular favor largely because of its slight expense and because the material was removed expediently with no inconvenience to the owner. Absolutely no thought was expended as to the ultimate destination of the waste matter—after removal from the eye sight it was forgotten. Lately, through the tireless efforts of Health Officers, the people have been taught that wastes discharged into the ground in this manner may contaminate a water supply—possibly the very water the citizens of a particular town are consuming.

Cities and towns, as well as individuals, are perpetuating this nuisance even now in the face of the existing statute. Modern sewerage systems are being or have been installed in small cities automatically eliminating numerous individual sewage wells. However, this procedure only transfers many probable points of pollution to one or several. The sewage from an individual household is conveyed in practically all cases, where sewerage exists, to one or several points of disposal where it receives treatment in a tank of one or another type. After such supposed "purification" it is discharged into the deep well—therefore transferring numerous potential points to one point of pollution. Because a treatment device has been provided the citizens feel safe and secure and fear no danger from the egress of sewage effluent underground although in this way the city, the collective individuals, are liable to seriously contaminate a water supply. Moreover in these same sewered cities are prominent, able citizens whose residences are easily accessible to and capable of being connected with the sewer, but are not. These people still adhere to the disagreeable individual deep well, preferring this economical, convenient, insanitary method to the more expensive and sanitary sewer connection. Practice of this character within range of sewerage is to be condemned and criminal action should be instituted against such individuals.

Before proceeding it might be advisable to dispel the fallacy which exists among many people, that sewage treatment tanks of one design or another purify sewage absolutely. It is immaterial whether the final disposal is into a septic tank, Imhoff or Reducing Tank—absolute purification is not effected. The effluent which enters the ground after treatment is in better condition than the raw sewage entering the tank, but not "pure." The correction of this firmly fixed erroneous belief among many may immediately make apparent why the disposal of tank effluent into the ground is potentially dangerous and as stated in the preceding paragraph merely consists at best of collecting the individual wells to one or several points of discharge. Sewage tanks are preliminary methods of treatment and unless sufficiently large bodies of water are available for the dilution and dispersion of the effluent such effluent should be subjected to additional treatment in order

to further the purification processes and render a stable non-putrescible sewage effluent. Treatment tanks are designed primarily to act as clarifiers and settling basins, receptacles into the bottom of which solid and subsiding matter can settle to undergo supplementary changes. After a retention period of several hours in such a tank the super-natant liquid clarified sewage, flows out, leaving deposited the greater portion of solid putrefactive material known as sludge. This sludge in the bottom of the tank undergoes further complex changes which need not be discussed in this article. Suffice to say here that sewage tanks remove from 85 to 95 per cent solid matter, 20 to 30 per cent suspended matter and colloids and about 15 to 30 per cent bacteria which shows that a considerable amount of original matter passes through the tank and into the subsurface waterbearing strata.

There is stated in a report of the United States Geological Survey¹ as follows: "The axis of the peninsula of Florida consists largely of rotten cavernous limestone, white, gray or yellow in color and of the Tertiary age. The main belt of these beds extends from the vicinity of Taylor, Madison and Suwannee counties southeastward to Pasco County and Vicinity." The formation is soft, porous and in some places is abundantly fossiliferous as shown by geological investigations, and has a varying thickness which Dall² estimates to be over 350 feet at Gainesville, 212 feet at Lake Worth, and 1,068 feet at St. Augustine. Recent borings,³ however, show this limestone to have a thickness of over 225 feet at Quincy, 250 feet at Alachua, and 325 feet at Bartow, dipping southward and to the sea. Because of the soft, porous character and the high carbonate content the Vicksburgian water bearing formation is subject to the intense solvent action of acids and gases inherent in the water. Rain in descending to the earth dissolves large percentages of carbon dioxide which is retained in lower regions of high pressure. In addition the water in passing through the soil and over the ground collects mineral and organic acids, also more carbon dioxide which results from organic decomposition. This carbonic acid greatly increases the solvent action of the water and lime, magnesia and other elements are rendered soluble.

The presence of sink hole depressions, and numerous lakes, is conclusive evidence of the existence of underground solution cavities, caverns and passages and show the honeycombed condition. "A level surface and a porous soil such as that of the lake region, favor the development of caverns because most of the rainfall sinks into the earth instead of off over the surface. As solution progressed the cavern roofs became weakened at numerous points and collapsed, forming the depressions known as sink holes." (Water Supply Paper No. 319). That solution action is intense has been revealed at Silver Springs near Ocala where Mr. E. H. Sellards has estimated a removal of 340 foot of solid matter per minute from the interior. These brief statements disclose the honeycombed cavernous conditions of the Vicksburgian formation, moreover, there is no absolute assurance that passages and cavities on one level do not communicate with those of another level. Because of the conditions existing in the limestone formation, the presence of void spaces and passages it is apparent that the one great water supply is being endangered by probable sewage contamination.

All the water supplies in the State of Florida, excepting one, are derived from wells driven into the Vicksburgian limestone formation, that expansive bulk of acid eaten geologic formation into which sewage and drainage wells also discharge. The water supply is extensive, almost without limit, and certain of production. Because of its practically universal usage the purity and wholesomeness should be maintained. The water, although very hard is of a good quality for domestic use, its hardness not being any greater than that of similar waters elsewhere in the country. In many cases, especially in regions of flowing wells, a decided sulphur content is noted, which is largely eliminated by aeration. But with this immense under-

1. Water Supply & Irrigation Paper No. 114, page 160.

2. Bull V. S. Geol. Survey No. 84, 1892, page 103.

3. Water Supply and Irrigation Paper No. 319, page 74.

ground supply, unlimited in quantity, coming from such cavernous honey-combed stratum, it is evident that its safe qualities should not be jeopardized by the careless discharge of sewage. In one city the sewage tank effluent enters a well within one-quarter mile of a deep water well—the sewage well penetrating a cavity at a depth of 150-200 feet. In another city raw sewage is disposed of into a well serving practically one-tenth of the city, this well being located within one-half mile of the city's three water well supplies—the only supply the city could possibly have. In all the localities sewage wells enter this same waterbearing stratum—that rotten, cavernous mass of underlying limestone. Mr. E. H. Sellards, State Geologist of Florida has stated in his 1908 Bulletin, "The question of possible contamination of the water supply through sewage wells is worthy of careful consideration. As previously stated, most of these wells enter the limestone and depend for efficiency upon reaching a cavity or a porous layer in the limestone. Both sewage and water wells are of variable depth. The limestone is traversed by solution cavities, and is for the most part of porous texture, thus permitting circulation of underground water.

Up to the present time no actual disease or epidemic has been traced to water having its source in sewage infected strata; however, cases of seriously contaminated wells have been noted and analyses made in the laboratory of the State Board of Health upon samples drawn from such infected wells. Enough analyses have been made upon deep well waters to convince one that the underground sources are being affected and are capable of a serious contamination. In one city a private deep well located 1.3 miles from a city sewage tank has shown intermittent pollution for the past four months while in another city the entire public supply has been badly polluted with the result that at present liquid chlorine is being applied as a disinfectant. The latter well which is about 1,100 feet deep has shown colon in raw water for the past nine months. Consequently sufficient evidence is available to indicate the possibility of a serious pollution of the underground sources.

In conclusion it would be fitting to request all individuals, corporations and cities to observe the present statute (Laws of Florida, 1913, Chapter 6443 No. 23) and cooperate one with the other to correct this method of sewage disposal. The State Board of Health stands ready to advise, cooperate and suggest remedies and alternative methods which would make disposal safe. Whenever possible the wells should be abolished but in such places where this is impossible sufficient additional treatment should be administered to render the sewage safe, stable and fit for such disposal.

Veterinary Notes

MANAGEMENT OF TUBERCULOSIS IN DAIRY CATTLE IN HAWAII

Dr. V. A. Norgaard, Territorial Veterinarian, in a recent discussion gives his methods of applying the tuberculin test and of dealing with the owners of tuberculous dairy cattle, which methods seem particularly applicable to Florida conditions. He said "I began some seven or eight years ago to try to eradicate tuberculosis from Honolulu and the city and county of Honolulu which includes the Island of Oahu.

"In the province of Honolulu proper, there are some two hundred or three hundred cattle but our tests in recent years includes some four thousand or five thousand head of cattle from the Island of Oahu—not dairy kine but cows milked only a part of the time. I began with the subcutaneous test and was sorry to find that we had about thirty per cent tuberculous cattle. We had succeeded in getting the Board of Supervisors of the municipality to pass an ordinance requiring that animals from which milk was being sold must be tuberculin tested. That is as far as it went but I found in the old Statutes of the Territory, a law which made it a misdemeanor to sell, dispose of in any way, etc., etc., any animal infected with an infectious or contagious disease, dangerous to human happiness.

"Of course, we classify tuberculosis as one of those diseases and the first time I caught a man selling milk from tubercular cattle that had been tested and branded, I had him brought into police court and fined. Since that time the law has held good and no condemned tuberculin branded reactors are any longer sold for dairy purposes; the carcass can be sold only when slaughtered and sold for beef.

"The following year, that is, after Dr. Ward and Dr. Baker published the article on the intradermal test as first introduced by Mohler and Martin, I took it up immediately and re-tested a number of the subcutaneous reactors and found the results were satisfactory. Since that time and for the past five years, we have used the intradermal test exclusively and I have so far to find a reacting animal which, on post-mortem examination, did not show the lesions; some have been small, others have been large. Of course, during the past three or four years, we have had practically no extensive lesions. We did away with them the first three years.

"Two or three years ago we changed from the injection in the subdural fold to the lower eye-lid and we have used that method exclusively since. A second year's test gave about seven per cent, brought us down to two per cent, maybe 2.8 per cent, that is, for all cattle on the island that are being at all used for milk. At the same time, inquiries from the local board of health, two years ago, as to cases of infantile tuberculosis, that is, all cases of tuberculosis in children under five years of age have been reduced in the city and county of Honolulu to less than one-third of what it had been in previous years while similar cases have increased in number in all other islands where no effort has been made to eradicate tuberculosis.

"The same results have recently been reached in Leeds and Manchester, where similar conditions exist. Where efforts have been made to eradicate from the commercial milk the tubercular germ, I may further say that every reacting animal has been destroyed and that not a cent of indemnification has been paid. That may seem a pretty hard proposition, but it can be done.

"When we started in, the dairy men who cleaned their herds raised the price of milk two cents a quart and I have figured out that the milk consumers of the city and county of Honolulu have paid in that way, at the rate of two hundred dollars per head for everyone of the thirteen or fourteen hundred head of reactors that we have destroyed. The cattle probably were not worth to exceed fifty dollars per head. The milk consumers have not objected to paying the increased price and, while it is safe to say that all of

the money certainly has not come back to the pockets of those who lost the cattle, it has converted into other channels. I take it, the milk dealers have profited most by it because the milk producer, even today, does not get more than seven or seven and a half cents for his milk, whereas, it sells for twelve cents. I may add that in no single case has it been necessary to go to the courts about any case.

"We use the double disk aluminum tag serial number A12909 and we put that in the ears at the time of the injection. When on the third day, we come back to inspect, we have a pair of sharp clamps which are put on the ears of the reactors. If the reactors show we take this clip off by severing it with a pair of forceps and a brand is put on the face.

"Everybody there knows now that if they try to sell or otherwise dispose of any of those reacting cows (in the first place, nobody wants to buy them) they know what the results will be and it has only been necessary a couple of times to suggest that prosecution would be made and things have been straightened out immediately.

"In the city test the two largest losers were the people who could afford it; one of them lost five hundred head, every one of which went to the slaughter house.

"At the last meeting of our legislature this spring, a member of the Agricultural College, with which I am connected, introduced a bill for the indemnification of those milk producers who had made an actual effort to clean their herds and protect them against reinfection, where there was no neglect on their part. The bill met with favor and we were promised ten thousand dollars for a starter, when a few of the milk producers took it into their heads that there was not going to be any more tuberculin testing and a few of those people have refused to have their herds tested on various grounds for upwards of a year. They succeeded in killing that bill. We even went to the Board of Health Association and said to them, 'What are you going to do about allowing your clients or patients to let their children drink tuberculous milk again? Are you going back to selling tuberculous cows with the corresponding increase of tuberculosis in children or are we going to get rid of the last two or three per cent we have?' They thought that we had better get rid of it, so we notified the obstructionists that their milk would no longer be sold or tolerated on the market unless they had their cows tested. They had them tested. Unfortunately, one of these men had twenty-eight reactors out of a hundred and thirty-eight and another had eighteen but those were only the ones that had let more than a year go since they were tested last and who thought that there would be no more tuberculin testing. All of the rest of them, I am glad to say, sixty per cent of the milk producers had herds absolutely free from tubercular animals for two years, some for three years, some for one year and so it came to the point that every one who had a reacting animal was willing to let us make the test every three months until he had the reactors down to three or four per cent.

"We tested every three months until it was cleared up, then two times a year until we had every man's herd cleaned up. Now I think we will get rid of the last trace we have and we have taken up the work on other islands where every little cow herd seems to have a considerable amount of tuberculosis. Unfortunately there was considerable opposition to the work but I do believe we shall be able to clean out the disease entirely from the island and without paying any compensation.

"I may add a few suggestions: If you gentlemen wish to take it up in your special districts, I believe it can be done everywhere in the world in every country without asking for million dollar appropriation or for hundreds of thousands of dollars, simply by allowing the milk producer to raise the price of his milk and back him up in it. This must be done by an ordinance of the municipality or medical board of health. You must have the cooperation of the board of health and of the municipality and, most of all, the medical fraternity. They are the ones who rule. If they agree to help you and to tell their clients and patients and let them know that milk from tuberculous cows is dangerous to the children, that it is well worth

while to pay a cent or two more for the milk so that it is clean, I am sure you can succeed.

"The first man who came to the Board of Health and demanded a clean bill of health and cleaned out his herd had one hundred clean Jerseys. He raised his price two and a half cents a quart and in the third month after he received his letter, giving him a clean bill of health, the demand for his milk at twelve and a half cents a quart more than doubled in one month, and as I say the price has been maintained ever since.

"We have no actual rules or have never enforced any rules to compel a man to take his animal out of his stable. If we had any trouble with a man, our plan was to go and see the people he sold the milk to and have them call him up on the telephone and say, 'I understand you had your herd tested the other day.' 'Yes.' 'I understand you have a sick cow?' 'Yes.' 'Have you still got that cow?' 'Yes, I still have it.' 'Well, you need not send me any more milk.' Later another party calls him up and the same thing happens, then another customer and probably after that, he will call me up and say, 'For heaven's sake, Doctor, I will send that cow to the slaughter house.' That is the way it is done in every case. That is about all the force we have used. There has been simply moral suasion and it shows you the benefit which can be derived from clean milk from healthy cattle. I wish you gentlemen would get at it because I believe it is up to the veterinarian and the veterinarian alone, if backed up by the local sanitary authorities. He can certainly do it and he must do it. Do not ask for laws and appropriations but get to work. Get the support of your local papers, put a few articles in now and then, stating what tuberculosis is and how dangerous the germs of tuberculosis are to the children through the milk and the rest will be solved.

"They will come to get their cattle tested. Tell them to get it out of the consumer by raising the price of milk and that will more than pay for the cost of cows you have to condemn and remember I started out with thirty per cent."

LOUISIANA TO FIGHT TICK

The permanent eradication of the cattle tick in Louisiana now seems assured as a result of the passage by the State legislature of the State-wide Tick-eradication Law. After April 1, 1918, tick eradication will be under the direction of the State Live Stock Sanitary Board, and the law provides that such parishes as may be designated by that board will be required to make adequate provision for the construction of dipping vats and the dipping of cattle for ticks, and to continue such dipping until the ticks are entirely eliminated.

While the law will not be enforced until April 1, 1918, the Federal authorities urge the wisdom of making provision now in the different parishes for the construction of vats and for the necessary chemicals for the baths.

As an additional safeguard against the spread of the tick, the State legislature has also passed a law prohibiting the movement of cattle from any quarantined area into the tick-free section of Louisiana or into any part of the State where systematic tick-eradication work is being conducted, unless the animals have been dipped twice in the standard solution, from 5 to 12 days apart. This dipping must be done under the supervision of a Federal State inspector, who will furnish a certificate of dipping. The cattle must not be exposed to tick infestation after the second dipping. Where cattle are intended for immediate slaughter these restrictions do not apply, but the slaughtering centers must be provided with facilities for handling cattle satisfactory to the State Live Stock Sanitary Board.—Weekly News Letter, U. S. Dept. of Agr.

Summary of Public Health Administration, July

SOUTHWESTERN DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Supervision of inspections by sanitary patrolman.

Hillsborough County: Inspection of Gillete School; matter taken up by mail with trustees of school concerning state law. Investigation of suspected poliomyelitis case at request of city health officer of Tampa; conference with city authorities concerning same; case diagnosed poliomyelitis. Investigation suspected case poliomyelitis at Palmetto Beach.

Riverview: Inspection of school; letter written to trustees concerning state law.

Gulfport and Pass-a-Grille: Inspection of stores at Gulfport. Inspection of open closets; copy of State law sent to stores not complying with screening law.

St. Petersburg: Sanitary inspection of city; copy of state screening law sent to stores not complying with same.

Largo: Reinspection of town; stores inspected for screen law; sanitary condition of town investigated.

Dunedin: Sanitary inspection of town; health conditions investigated; stores and open closets inspected.

Safety Harbor: Inspection for health conditions and observance of screening laws:

Palmetto: Sanitary inspection of city; stores inspected.

Manatee: Investigation of poliomyelitis case.

Plant City: Investigation of suspected case poliomyelitis at request of attending physician.

Sanford: Investigation of leprosy case at Sanford; conference with city health officer concerning same.

Ellenton: Sanitary inspection of town; stores and open closets inspected.

Parish: Sanitary inspection of town; stores inspected; school inspected; investigation of health conditions.

West Tampa: Classification of skin diseases.

Bradentown: Sanitary inspection of Bradentown; stores inspected and health conditions investigated.

WESTERN DISTRICT

Pensacola: Routine work, office of Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections by sanitary patrolman as follows: Screening Law—restaurants 3, lunch counters 4, dining rooms 3, kitchens 2, butcher shops 2, fruit stands 6. Surface Closet Law—private residences 15. Sanitary Nuisance Laws—disposal of garbage 2. Communicable diseases—typhoid fever 3, tuberculosis 4. Abatements ordered where violations found. Investigation of a menace to health in shape of breeding place for flies; arrangement made for abatement.

SOUTH TROPIC DISTRICT

Key West: Routine work, office of Assistant to the State Health Officer, July 1-8. Leave of absence July 8-31. Supervision of inspections by sanitary patrolman, and management of communicable diseases. Routine laboratory work.

SOUTH CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer. Investigation of suspected case of infantile paralysis.

Blitchton: Conference with physician regarding typhoid situation; typhoid vaccine furnished for the indigent.

Sanford: Investigation suspected case of leprosy; diagnosis of leprosy made.

High Springs: Conference with mayor and citizens in regard to sanitary condition of town, and advice given how to better the same.

Dunnellon: Sanitary investigation.

CENTRAL DISTRICT

(Leave of absence, Assistant to the State Health Officer).

EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer. Abatement of violations of State screening law.

Hastings: Sanitary inspection of town.

Palatka: Sanitary inspection of town. Abatement of violation of State screening law.

Crescent City: Investigation alleged case typhoid fever; sanitary inspection of town; conference with councilmen relative to enforcement of "privy" law, and assistance given in drawing up town ordinance covering the subject.

Jacksonville: Met two public health nurses operating in East Coast District.

New Smyrna: Sanitary inspection of town.

Hawk's Park: Sanitary inspection of town.

Fort Pierce: Investigation of alleged sanitary nuisance, upon request of mayor; inspection of canning and bottling factory.

Melbourne: Sanitary inspection of town.

Eau Gallie: Sanitary inspection of town.

Cocoa: Sanitary inspection of town.

Titusville: Sanitary inspection of town.

DeLand: Sanitary inspection of town.

Lake Helen: Sanitary inspection of town.

Orange City: Sanitary inspection of town.

Daytona: Sanitary inspection of town.

Bunnell: Sanitary inspection; conference with mayor and president of council in regard to sanitary matters.

Dupont: Sanitary inspection; visit to pellagra case.

WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer. Collection data for Vital Statistics Department. Investigation cases of dog bite; dog's head sent to laboratory for examination.

Crawfordville: Collection of data for Vital Statistics Department.

Helen: Investigation typhoid case.

Carrabelle: Sanitary inspection.

Apalachicola: Sanitary inspection. Conference with city physician and mayor in regard to screening; shrimp factories ordered screened.

Port St. Joe: Inspection of town, and conference with city physician.

Perry: Investigation case anterior poliomyelitis.

Columbia: Investigation typhoid fever outbreak.

PASSENGER INSPECTION ON ACCOUNT INFANTILE PARALYSIS

Jacksonville: 2 Assistants to the State Health Officer, 2 District Public Health Nurses. Inspection of children under 16 years of age from Northern points, and under observation at destination.

EDUCATIONAL HEALTH EXHIBIT TRAIN

No towns visited during July. Total number towns visited to August 1st in 1916.....121

PUBLICITY AND PUBLICATIONS

Monthly bulletin, "Health Notes," Vol. XI, No. 7, July, 1916, pp. 24.
 Press service bulletins to Florida newspapers: July 5, "Banishing Disease;"
 July 12, "Critics and Criticism;" July 19, "Infantile Paralysis;" July 26,
 "Gossip. Repeating Rumors Relating to Disease."

Publications out in July: Pub. 166, "Vital Statistics, Florida, Year 1915,"
 44 pp. reprint from Vol. XI, No. 7, Health Notes, July, 1916.

Distribution of literature during July:

Mailed upon request.....	687
Press service bulletins to Florida newspapers (4 issues).....	1,100
Health Notes, July, mailing list.....	10,400

Total number pieces distributed.....	12,187
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Number pieces literature distributed in 1916 to August 1.....	121,834
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SMALLPOX

(No cases of smallpox reported in Florida during July)

Total number of cases reported in 1916 to August 1.....87

DISTRICT TUBERCULOSIS NURSE INSPECTION

Status of Tuberculosis District Nursing for Month Ended July 31, 1916

<i>Residence of Cases Visited to Date by Districts</i>	<i>Total Number of Cases Under Instruction Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Cases in District Under Instruction to Date</i>	<i>Total Number of Cases Following Instruction</i>
District No. 1.....	67	23	4	4	..	82	37
District No. 2.....	44	..	..	..	..	44	19
District No. 3.....	135	..	..	..	..	135	79
District No. 4.....	72	12	6	2	1	75	38
District No. 5.....	138	..	..	..	..	138	72
District No. 6.....	164	16	4	1	1	174	130
District No. 7.....	..	..	..	..	..	..	..
District No. 8.....	..	39	..	..	..	39	26
District No. 9.....	135	39	6	10	4	154	154
District No. 10.....	129	8	1	3	..	132	83
District No. 11.....	66	21	11	11	..	60	31
District No. 12.....	166	20	11	24	2	149	149
Tampa (colored cases visited by colored nurse).....	..	31	3	..	..	28	26
Total.....	1,116	209	46	55	13	1,210	844

BIOLOGICAL PRODUCTS

Distribution of Biological Products during July (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only.) Number of persons receiving treatment:

<i>County and Town</i>	<i>Anti-Smallpox Vaccine</i>	<i>Anti-Rabic Vaccine</i>	<i>Anti-Typhoid Vaccine</i>	<i>Diphtheria Antitoxin Curing and Immunizing</i>	<i>Tetanus Antitoxin Immunizing</i>
ALACHUA					
Gainesville .....	..	..	..	4	..
BRADFORD					
Starke	2	..	..	..	..
DUVAL					
Jacksonville	22	4	57	15	1
DE SOTO					
Sebring .....	..	..	1	3	..
ESCAMBIA					
Pensacola .....	..	..	14	..	..
GADSDEN					
Havana .....	..	1	..	..	..
JEFFERSON					
Lamont .....	..	1	..	..	..
Monticello .....	..	..	..	1	..
LEON					
Tallahassee	10	5	..	..	..
MONROE					
Key West.....	..	..	55	..	..
NASSAU					
Fernandina	20	..	..	..	..
SAINT JOHNS					
Hastings .....	..	..	10	1	..
ST. LUCIE					
Okeechobee	10	..	..	..	..
VOLUSIA					
Daytona .....	..	..	12	4	..
New Smyrna	40	1	..	..	..
WALTON					
DeFuniak Springs.....	..	..	2	..	..
Total.....	104	12	151	28	1

Total number persons receiving anti-smallpox vaccine in 1916 to August 1.....3,755
 Total number persons receiving Pasteur treatment in 1916 to August 1.....35
 Total number persons receiving anti-typhoid vaccine in 1916 to August 1.....607
 Total number persons receiving diphtheria antitoxin in 1916 to August 1.....91
 Total number persons receiving tetanus antitoxin in 1916 to August 1.....6

CRIPPLED CHILDREN

NAMES	In St. Lukes 7-1-16	In Brewster (Col.) 7-1-16	Outside Treatment 7-1-16	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment	Examined, Not Admitted	Total Cases During Month	Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment August 1st, 1916
F. P.	1	..	..	..	..	..	..	..	1	Daily dressings....	..	Tbc. Spine....	1
H. M.	1	..	..	..	..	..	..	..	1	Daily dressings....	..	Tbc. Ilium....	1
W. W.	..	1	..	..	..	..	..	..	1	..	..	Polio Paralysis..	1
B. K.	1	..	..	..	..	..	..	..	1	Adhesive dressing every 5 days....	..	Club Feet.....	1
R. W.	1	..	..	..	..	..	..	..	1	..	..	Spastic Paralysis	1
O. D.	1	..	..	..	..	..	..	..	1	Daily dressings....	..	Tbc. Spine....	1
F. B.	..	1	..	..	..	..	..	..	1	..	..	Ankylosis Knee..	1
A. P.	1	..	..	..	..	..	..	..	1	Skin graft 29th daily dressing...	..	Osteomyelitis ..	1
H. R.	..	1	..	..	..	..	..	..	1	..	..	Tbc. Hip.....	1
L. S.	1	..	..	..	..	..	..	..	1	..	7th cured.....	Polio. Paralysis.	..
D. M.	1	..	..	..	..	..	..	..	1	..	3d cured.....	Club Feet.....	1
A. F.	..	..	9th	..	..	..	..	..	1	Skin graft 29th daily dressing...	..	Leg ulcers—Periostitis ...	1
I. T.	..	..	4th	..	..	..	..	..	1	Astragalectomy 8th. casts 15-16.....	..	Spastic Paralysis	1
T.M'G.	..	..	2d	..	..	..	..	..	1	..	14th not treated..	Spastic Paralysis	1
Total	8	3	..	..	..	..	..	..	14	..	3	..	11

BACTERIOLOGICAL LABORATORIES
SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Miami	Total
Animal Parasites.....	216	115	35	8	374
Diphtheria	94	47	16	2	159
Gonorrhoea	99	40	28	14	181
Malaria	278	168	38	23	507
Pathological	3	17	4	..	24
Rabies	10	1	..	..	11
Tuberculosis	115	67	26	15	223
Typhoid	300	142	43	27	512
Water: Bacterial Examination.....	49	9	1	22	81
Sanitary Chemical Examination.....	2	..	..	..	2
Wassermann	273	68	10	12	363
Miscellaneous	56	49	19	77	201
	1,495	723	220	200	2,638
Total number of specimens examined by the Laboratories of the State Board of Health during July, 1916.....2,638					

Tallahassee and Key West Laboratories closed during July.

DISEASES DETERMINED BY BACTERIOLOGICAL EXAMINATION DURING JULY.

1916

(MALARIA)

TOWN	Filaria	Diphtheria	Gonorrhoea	Etiocautumnal	Quartan	Terlian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Rabies	Ascaris	Oxyuris	Trichuris	Tapeworm	Lambdia Int.	Wasserman	Leprosy
Apalachicola	1	.	3	.	.	.	.	.	.	.	.
Avon Park	2	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
Bartow	1	.	.	.	.	.	.	.	.	.	.
Big Bayou	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bonifay	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Boynton	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Bradentown	1	.	.	.	.	.	.	1	.
Brooksville	1	1	.	.	.	.	.	.	.	.	.
Bunnell	1	.	1	.	.	.	.	.	.	.	.	.	.
Center Hill	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Chattahoochee
Chiefland	1	.	3	.	.	.	.	.	.	2	.
Citra	1	.	1	.	.	.	.	.	.	.	.
Clearwater	2	.	.	.	.	.	.	.	.	.	.
Columbia	3	.	.	.	.	.	.	.	.	.	.
Crescent City	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Crestview	1	.	1	.	.	.	.	.	.	.	.
Dade City	1	.	.	.	.	.	.	.	.	.	.
Daytona	2	.	.	.	.	.	.	.	.	.	.
Deer Park	1	.	.	.	.	.	.	.	.
Dunnellon	1	.	.	.	.	.
Ellenton	1	.	.	.	.	.	.	.	.
Fellsmere	1	.	.	.	.	.	.	.	.	.	.
Fernandina	1	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.	.
Ft. Barrancas	1	.	.	1	.	.	.	.	.	.	.	.	.
Ft. Meade	1	.	.	.	.	.	.	.	.	.	.	.	.
Ft. Myers
Ft. Pierce	1	.	.	.	.	.	.	.	.	.	.
Gainesville	1	.	.	.	.	.	.	.	.	.	.
Gardner	1	.	.	.	.	.	.	.	.	.	.
Green Cove Spgs.	1	.	3	.	.	.	.	.	.	.	.
Greensboro	1	.	.	.	.	.	.	.	.
Greenville	1	.	.	.	.	.	.	.
Havana	5	.	1	.	.	.	.	.	.	.
Hawthorn	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
Hilliard	3	.	1	.	.	.	.	.	.	.	.
Homestead	2	.	.	.	.	.	.	.	.	.	.
Inverness	1	.	.	.	.	.	.	.	1	.	.	.	.
Jacksonville	26	1	.	.	1	1	11	13	10	1	.	.	1	.	130	.	.
Release Cult.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
S. Jacksonville	1	.	.	.	.	.	.	.	.	.	.
Kathleen	1	.	.	.	.	.	.	.	.	.	.
Kenansville	1	.	.	.	.	.	.	.
Kissimmee	2	.	.	.	.	.	.	.	.
Lake Butler	1	.	1	.	.	.	.	.	.	.	.
Lake City	1	.	.	.	.	.	.	.	.	.	.
Lake Worth	1	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	.
Lakeland	1	.	2	2	1	.	.	.	.	.	.	.	.
Lamont	1	.	.	.	.	.	.	.
Largo	1	.	.	.	.	.	.	.	.	.
Larkins	1	.	.	.	.	.	.	.	.	.
Lauderdale	3	.	.	.	.	.	.	.	.	1	.
Leesburg	1	3	1	1	.	.	.	.	.	.	.	1	.
Live Oak	4	.	2	.	.	.	.	.	.	.	.	.
Lula	1	.	.	.	.	.	.	.	.	.
Maitland	2	.	.	.	.	.	.	.	.	.
Manatee	1	.	.	.	.	.	.	.	.	.	.	.
Mandarin	1	.	.	.	.	.	.	.	.	.	.	.
Mayo	2	.	.	.	.	.	.	.	.	.
Melrose	1	.	.	.	.	.	.	.	.	.
Miami	1	.	3	.	.	4	.	2	2	.	.	.	.	.	.	.	2	.
Monticello	1	.	.	.	.	.	.	.	.	.
Morrison	1	.	.	.	.	.	.	.	.	.
Mt. Dora	1	.	.	.	.	.	.	.	.	.	.	.
Mulberry	1	.	.	.	.	.	.	.	.	.	.	.
Munson	1	.	.	.	.	.	.	.	.	.	.	.
New Smyrna	3	.	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.
O'Brien	1	.	.	.	.	.	.	.	.	.	.	.
Ocala	1	.	.	.	.	.	.	.	1	.	.	.
Ojus	1	.	.	.	.	.	.	.	.
Okeechobee	1	.	.	.	.	.	.	.	.

MALARIA

TOWN	Filaria	Diphtheria	Gonorrhoec	Etiocautummal	Quarion	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Rabies	Ascaris	Oxyuris	Trichiuris	Tapeworm	Lambtia Int.	Wasserman	Leprosy
Okeelanta	3	..	..	1	..	..	2	6	..	..	..	1	..	..	..	..
Orlando	2	..	..	..	..	..	..	..	..
Oxford	3	..	..	..	..	..	..	..	..
Palatka	9	..	..	..	..	..	7	15	..	..	..	..	..	..	..	..
Pensacola	1	..	..	..	..	..	..	..	..
Plant City.....	1	1	1	..	1	..	..	..	..	..	..	..	..
Port St. Joe....
Punta Gorda...	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quincy	1	1	..	..	..	..	..	..	..	..	..
River Junction..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
San Antonio....	3	..	..	..	..	..	..	..	..
St. Augustine...	..	1	..	..	..	..	..	4	..	3	..	..	..	..	..	..	..	..
St. Petersburg..	1	..	..	..	..	..	..	..	..
Sanford	1	1	..	..	..	1	1	2	..	..	..	..	1	..	..	1
Sarasota	3	..	..	..	..	..	..	..	..
Sorrento	1	..	..	..	..	..	..	..	..
Springdale	1	..	..	..	..	..	..	..	..	..	..
Starke	1	..	..	..	..	1	..	..	..
Tallahassee	1	1	1	..	2	1	..	..	..	..	..	..	..
Tampa	1	12	..	4	..	9	3	7	..	3	3	4	1	1	13	..	..
West Tampa....	3	..	..	2	..	3	..	..	..	..	..
Tarpon Springs	1	..
Tiger Bay	1	..	..	..	..	..	..	..	..
Titusville	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Wauchula	3	..	..	1	..	..	..	..	..	..	1	..
Wellborn	1	..	..	..	..	..	..	..	..
Williston	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winter Haven..	1	..	..	..	..	..	..	..	..	..
Worthington	1	..	..	..	..	..	..	..	..	..
Total.....	1	18	59	2	..	13	9	82	44	104	5	6	1	10	4	1	152	1

BUREAU OF VETERINARY SCIENCE
TICK ERADICATION

Cattle dipping vats reported constructed during July, 1916.....None

GLANDERS

Diagnosed by Veterinarian during July, 1916:

Jacksonville.....1 horse, \$75.00

Total number of cases in 1916, to August 1.....10

IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 37; Mules, 52; Cattle, 40; Hogs, 8; Dogs, 1.....138

EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 0; Mules, 2; Cattle, 1,859; Hogs, 1.....1,861

INTRASTATE SHIPMENT OF CATTLE TO DADE COUNTY

Cattle1

HOG-CHOLERA SERUM DISTRIBUTED, JULY, 1916

	C. C. Serum Distributed
Alachua	35,900 c.c.
Baker .....	..... c.c.
Bay .....	..... c.c.
Bradford	11,350 c.c.
Brevard .....	..... c.c.
Broward	1,000 c.c.
Calhoun	5,000 c.c.
Citrus	7,750 c.c.
Clay .....	..... c.c.
Columbia	1,000 c.c.
Dade .....	..... c.c.
DeSoto	6,550 c.c.
Duval	3,700 c.c.
Escambia .....	..... c.c.
Franklin	1,000 c.c.
Gadsden	6,650 c.c.
Hamilton	1,750 c.c.
Hernando	29,100 c.c.
Hillsboro	29,550 c.c.
Holmes	11,950 c.c.
Jackson	19,850 c.c.
Jefferson	4,900 c.c.
Lafayette .....	..... c.c.
Lake	1,200 c.c.
Lee .....	..... c.c.
Leon	3,700 c.c.
Levy	7,750 c.c.
Liberty	2,000 c.c.
Madison	8,950 c.c.
Manatee .....	..... c.c.
Marion	30,150 c.c.
Monroe .....	..... c.c.
Nassau .....	..... c.c.
Orange .....	..... c.c.
Osceola .....	..... c.c.
Palm Beach .....	..... c.c.
Pasco	2,100 c.c.
Pinellas	1,000 c.c.
Polk	4,850 c.c.
Putnam	2,000 c.c.
Santa Rosa	5,550 c.c.
Seminole .....	..... c.c.
St. Johns .....	..... c.c.
St. Lucie .....	..... c.c.
Sumter	1,550 c.c.
Suwanee	6,800 c.c.
Taylor .....	..... c.c.
Volusia	4,500 c.c.
Wakulla	1,000 c.c.
Walton	19,350 c.c.
Washington	4,700 c.c.
Sold 1,333 c.c.	Total 291,550 c.c.

7,500 c.c. Serum used by Federal Hog-cholera agent in demonstration work.

Estimated number of hogs treated, July.....	10,934
Estimated weight of hogs treated, July.....	666,974 lbs.
Amount of hog-cholera serum purchased during July.....	300,000 c.c.
Cost of serum purchased during July.....	\$2,250.00
Estimated number of hogs treated in 1916, Aug. 1.....	58,806
Estimated weight of hogs treated in 1916, Aug. 1.....	3,563,177
Cost of serum purchased in 1916, in Aug. 1.....	\$9,250.00

VETERINARY INSPECTIONS FOR THE MONTH OF JULY

July 1, Cottdale, inspection of hog for shipment; July 2, Jacksonville, inspection of two mules for shipment; July 3, Kissimmee, inspection of 169 cattle for shipment; July 4, Key West, inspection of one horse for entrance into the United States; July 6, Kissimmee, inspection of 64 cattle for shipment; July 6-31, Escambia County, vat construction; July 7-8, Dade County, tick quarantine; July 10, Dade County, tick quarantine; July 12, Dade County, tick quarantine; July 17-18, Chipley, investigate report of anthrax; July 18, Kissimmee, inspection of 624 cattle for shipment; July 18-20, Arcadia, vat construction; July 19-20, Marianna and Clarksville, investigating disease in cattle; July 20, Jacksonville investigate glanders, condemned; July 21, Dade County, tick quarantine; July 21, Pierson, investigate glanders, negative; July 25, Monticello and Lamont, investigating report of glanders; July 27, Kissimmee, inspecting 694 cattle for shipment; July 27-28, Glen St. Mary, investigating cattle disease; July 27, Kissimmee, inspection of 308 cattle for shipment; July 28, Dade County, tick quarantine; July 28-29, Monticello, investigating report of anthrax; July 28, Jacksonville, investigating glanders, negative.

TWO TYPES OF RURAL HOMES.

THE INSANITARY HOME

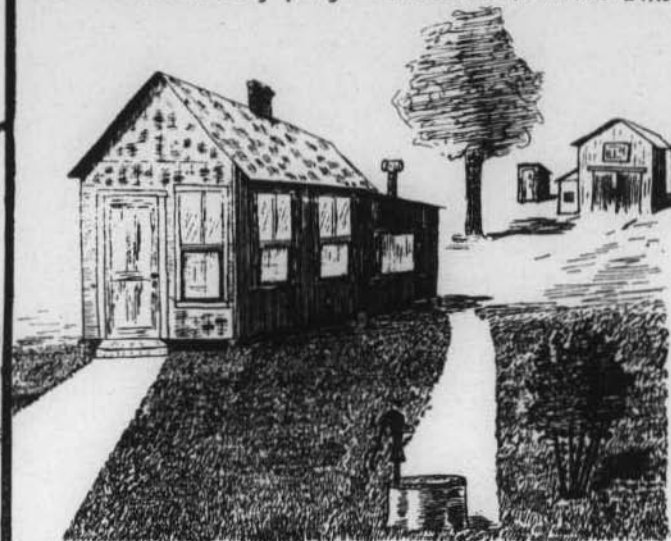
Well polluted by nearby privy and barnyard.
Disease carrying flies entering kitchen from privy.
Closed sleeping room windows - Promote tuberculosis.
Open well, uncovered barrel, tin cans - Breed mosquitoes.
Open privy, unscreened manure pile - Breed flies.



DISEASE-MISERY-DEATH

THE SANITARY HOME

Privy and barn safe distance from well and house.
No filth - No flies on premises.
Open, screened windows - Let in fresh air - Keep out flies and mosquitoes. Enclosed well.
Screened sanitary privy - Screened manure bin.



HEALTH-HAPPINESS-SUCCESS

NOT A QUESTION OF PREFERENCE, BUT OF DUTY.



HEALTH NOTES

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Jacksonville

BRANCH LABORATORIES

Tampa Pensacola Miami
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.
- Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.
- Publication 158, Malaria, April, 1916, pp. 4.
- Publication 159, Some Poultry Pests, April, 1916, pp. 10.
- Publication 160, Annual Report State Board of Health of Florida, April, 1916, pp. 256.
- Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).
- Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.
- Publication 163, Hog Cholera, pp. 30.
- Publication 164, Annual Report of Veterinary Department, 1915, Reprint from 27th Annual Report of the State Board of Health, April, 1916, pp. 56.
- Publication 165, Annual Report of Crippled Children Treatment, 1915, Reprint from 27th Annual Report State Board of Health, April, 1916, pp. 6, illustrated.
- Publication 166, Vital Statistics, 1915, Reprint from June, 1916, Health Notes, pp. 44.
- Publication 167, What You Should Know About Tuberculosis, Aug., 1916, pp. 32.
- Publication 168, "A Health Sermon," Reprint from June, 1916, Health Notes, pp. 6.

PREVENTION OF INFANTILE PARALYSIS

To control the present epidemic of infantile paralysis, according to a statement issued by the United States Public Health Service today, the chain of infection between persons harboring germs of the disease and the well members of the community should be broken. Infantile paralysis is probably caused by a very minute organism found in the nasal, mouth and bowel discharges of those who have the disease or who are carriers of the germ without themselves suffering from the ailment. All of the steps in the spread of the infection are not known but if this germ can be prevented from passing from the infected to the well person, the disease will cease.

Infantile paralysis is not a disease of recent origin. Sporadic or scattered cases have occurred throughout the country for many years but it is only during the last decade that the infection has assumed epidemic proportions in the United States. The present epidemic in New York City, on account of its magnitude and virulence, has awakened the residents of many communities to the danger of the importation of the disease into their own midst. This danger is real, but if due precautions are exercised it is believed that the epidemic will subside.

The actual control of the present epidemic must be left to the city, State and Federal health authorities. These organizations will properly quarantine and care for affected persons, prescribe sanitary measures and limit as may be necessary the travel of individuals in order to protect neighboring districts from the infection. Individuals and communities, however, can do much toward their own protection.

Poliomyelitis is probably spread directly or indirectly, through the medium of infective secretions. Account must therefore be taken by communities of every means by which such secretions are disseminated. Promiscuous expectoration should be controlled. The common drinking cup affords a method for the interchange of material of this nature and should therefore be abolished. Rigid cleanliness of glasses and utensils at soda fountains, in saloons and other public places should be enforced. Flies, roaches and other vermin, by coming in contact with infective secretions, may possibly convey them to our food and thus directly bring about the development of disease. Therefore eliminate insects. Street and house dust bear a definite relation to the spread of many infections and it is not unreasonable to presume that they may be a factor in the dissemination of infantile paralysis. Maintain strict cleanliness of streets, yards and alleys in order to prevent the breeding of insects and other vermin. See that all garbage and waste are properly cared for and collected at regular and frequent intervals. Guard all food supplies, especially milk and other perishable products. Digestive troubles of children arising from the ingestion of food of questionable quality may lower resistance. Assemblies of children in infected localities are to be discouraged, if not actually forbidden. While the above measures are in a sense general and applicable to many epidemic diseases, their importance should not be overlooked.

Individual preventive measures may be thus summarized:

Summon a physician at once and immediately notify the health

officer of the presence of the disease. If the disease is present in the community, medical aid should be sought whenever a child is sick no matter how light the illness; many cases of infantile paralysis begin with a slight indisposition. Should the illness prove to be infantile paralysis isolate the patient, place a competent person in charge, and reduce all communication with the sick room to a minimum. Hospital care is preferable, not only for the child but in order to better safeguard against the spread of the disease. The sick room should be well ventilated and screened. Nasal and mouth secretions should be received in cloths, placed in a paper bag, and burned. The clothing of the child, the bed linen, and the excretions should be disinfected in the same manner as for typhoid fever, that is by boiling, the long continued application of 5 per cent carbolic, or other well recognized disinfectant. The same is true for dishes and drinking vessels. Nurses should exercise the same precautions as regards cleanliness of hands in caring for infantile paralysis patients as for those afflicted with other infectious diseases.

A child may convey the disease to others even after a lapse of several weeks. For this reason quarantine should be maintained for a considerable period, usually from six to eight weeks, and the above precautions should be adhered to during this time. Disinfection of the room following recovery is advisable.—*Health News, U. S. Public Health Service.*

DECEMBER 3 TO 10 WILL BE TUBERCULOSIS WEEK!!

December 3 to December 10 inclusive has been set aside as Tuberculosis Week in the United States, according to an announcement by The National Association for the Study and Prevention of Tuberculosis.

During this week an effort will be made to enlist the co-operation of every church, school, anti-tuberculosis and public health organization, lodge and working men's organization in the United States in an active effort to bring tuberculosis to the attention of the people.

Three special feature days will be held during the week. December 6 will be National Medical Examination Day. On that day an effort will be made to get everybody, men, women and children, whether sick or well, to be examined in order to find out if they have any defects or impairments of their bodies that need attention. If the examination is not possible on December 6, appointments will be made then for later examination.

December 8 will be Children's Health Crusade Day. It is hoped at that time to launch a national organization of Modern Health Crusaders, an association of the children of the United States in the public schools, for fighting against tuberculosis and for better health.

December 3 or 10 will be observed, according to the convenience of the churches, as Tuberculosis Day. A special sermon and a series of talking points for ministers and others have been prepared and will be ready for distribution in the near future.

Last year over 150,000 organizations and institutions took part in the Tuberculosis Week celebration. It is expected that this year this number will be greatly increased.

WHOLE-HEALTH OR SEMI-HEALTH?

"Only one in twenty persons," says the State Board of Health, "enjoys whole-health; the rest live on in a state of semi-health, not sick enough to go to bed nor well enough to engage in their work with zest and enjoyment. Those who half-live from the standpoint of health, health-live from many other viewpoints. For instance, a man who lives only half well is only half efficient. He is capable of using only half of his mental and physical powers and therefore he is only half productive.

"People live in a state of semi-health mainly for two reasons: First, because they don't know the pleasure of good health nor do they appreciate its value in life. They have gotten into the habit of enjoying poor health and really want nothing better. Second, they live in a state of semi-health on account of their indiscreet modes of living. They usually over-indulge at the dinner table, leave off physical exercise, lose sleep and get insufficient rest, fresh air and sunshine. In other words, they don't order the affairs of the day toward an efficient and healthful life. Good health must be ordered at every meal and cultivated in every daily habit in order to be enjoyed and mean most to life."—*Press Service, North Carolina State Board of Health.*

THE UNITED STATES PUBLIC HEALTH SERVICE ASKS DO YOU

Think dog muzzling cruel and then marvel at the spread of rabies?

Carefully select your brand of liquor and then feed your children unpasteurized milk?

Repeat the Golden Rule and then sneeze in somebody's face?

Go camping for your health and then place your toilet so that it drains into your water supply?

Health Briefs

Sickness lowers earning capacity.

Low wages favor high disease rates.

A female fly lays an average of 120 eggs at a time.

Rural sanitation is a health protection to the city-dwellers.

Rats are the most expensive animals which man maintains.

Sunlight and sanitation, not silks and satins, make better babies.

Exercise in the garden is better than exercise in the gymnasium.

It's foolish to educate a boy and then let him die of typhoid fever.

Clean water, clean food, clean houses make clean healthy American citizens.

One million, two hundred thousand Americans die each year, it is estimated.

It is estimated that the average manure pile will breed 900,000 flies per ton.

Heart disease, pneumonia and tuberculosis cause more than 30 per cent of deaths.

The U. S. Public Health Service is the nation's first line of defense against disease.

The U. S. Public Health Service issues a free bulletin on the summer care of infants.

The State of California has reduced its typhoid death rate 70 per cent in the past ten years.

Sanitary Engineering Notes

Typhoid is described as a disease of defective civilization. The logic is plain. Typhoid results from defective sanitation and defective sanitation means defective civilization.—Eng. and Con. Sept. 13, 1916.

How many small towns pride themselves on their "white way lighting system" and excellently paved streets—yet have alleys, backyards and secluded spots reeking with filth?

Every household should be supplied with a proper garbage can—one preferably of galvanized iron equipped with a tightly fitting cover.

Garbage disposal starts at home. Do you separate your refuse?

REFUSE DISPOSAL IN SMALL TOWNS

By GEORGE W. SIMONS, JR., Chief, Bureau of Engineering
(Read before Sanitary Engineering Section, American Public Health Association in convention Rochester, N. Y., Sept. 7, 1915)

Not long ago a middle western engineer made the following statement: "It is no uncommon thing to hear small town officials boast of a 'Great White Way' lighting system and a casual observation, even at night, often discloses alleys reeking with garbage and refuse for the want of a regular collection system." This statement practically covers the ground but to make it more comprehensive I wish to include disposal systems as well as collection systems. If proper disposal methods are employed, collection systems are more than likely to be satisfactory.

In order to confine this paper to present conditions as found in small towns, I shall take the liberty to discuss only towns under 8,000 inhabitants, assuming these as being typical of other small towns.

The information contained herein was acquired largely from a recent country wide investigation conducted during the past year, also from personal trips taken and observations made.

The refuse problem in the average small town has received little or no attention up to the present time. In answer to the numerous inquiries from towns throughout the country, it was astounding to note the laxity and carelessness shown this branch of sanitation. Not small towns alone are guilty of inactivity but it is regrettable to see many well known large cities among the number. Methods of disposal in vogue are indeed primitive, but when one stops to consider and analyze the situation in the small town, the conditions are not so alarming as at first may seem. The methods of disposal employed are all that the citizens demand, and they seem perfectly satisfied in most instances. Owing to the small per capita quantities of refuse produced, the un-

crowded living conditions, ample available dump grounds, lack of serious nuisances arising from refuse, all of which factors explain why the problem has not received more consideration to date. The problem has not yet been brought forcibly to the attention of city officials to any marked extent, but I am pleased to say that there is evident an awakening among many small town officials and in some cases actual signs of real live interest are being manifested; this latter interest being largely aroused by the active women's organizations. It was not uncommon in the investigation, to have a city official express extreme regret at the condition exhibited by his town. Lack of finances, lack of initiative coupled with lack of interest and cooperation is probably the real root of inactivity—considered in conjunction with the other above factors—in this line of sanitary municipal cleaning.

Commencing with the smallest unit and working to the largest we will note actual conditions as found today. In towns, which by some present would be designated as villages—towns having populations not in excess of 1500 people—no regular disposal system is employed. In such places the houses are all well distanced from each other, sufficient room is available, and in many cases householders keep chickens, a dog, cats, or sometimes even pigs. When the meals are finished the waste food matter is either cast out to the animals, or thrown into the slop pail to be dumped later into some nearby low spot—and sometimes thrown onto the rear yard of the premises. Generally, the liquid waste is thrown into the yard or the alley, it being no uncommon sight to see streams of swill trickling down some alley. The ashes are thrown out each day onto a pile which accumulates throughout the winter and in spring is carted to some low spot, or out of the way site, by the householder or a hired team. The rubbish, usually small in amounts, is either burned or cast away with the ashes. Apparently no system is practiced, the disposal problem being of the least significance, the refuse when it does accumulate to such a degree as to become troublesome, it is easily removed to a remote place.

Passing to larger towns—in range from 1500 to 3000, still we find no regular systematic disposal employed. These towns, as previous ones, are rural, many of the people keep chickens, pet animals and even pigs. What kitchen waste is not fed to the animals is thrown into the slop pail to be dumped as in the smaller towns. But in this instance the dumping ground is farther removed from the house and a teamster is paid by a number of people to cart the refuse to the dump ground. The ashes and rubbish, old cans, iron, etc., is removed once or twice a year as is seen fit by the householder. In many cases of places within this limit, the town owns the dump ground which is located at the city limits or beyond. On this dump ground every waste product is placed and unless the dump is well attended and trimmed it is all but commendable. Even here, the problem is not of such great concern to the townsman, one or two men having carts with which they collect refuse from a few of their subscribers whenever time from other work allows. In some of these towns farmers come to town to collect the organic waste each day from a few homes, which they utilize for hog feed. Recently, in one of these small towns of 3,000 people, I spent considerable time studying the situation. Here the municipality maintained

a dump yard at which, every day, was kept a man whose duty it was to trim the dump, spread the material about, mix it, burn the loose paper and inflammable matter. As a result the dump looked very satisfactory, was neat and furnished a favorable means of disposal in this case. It was located a sufficient distance from the town so that odors were not perceptible at any time, as a matter of fact, odors were not noticeable 300 feet distant. This system of municipal dumps in small towns, if well attended, well trimmed furnishes a favorable form of disposal, but one which is not to be encouraged or recommended.

In towns of this size and larger (3,000) a junk dealer is usually located who picks up and buys scrap iron, metal, old rubbish, paper and rubber. This practice rids small towns of much bulky rubbish, at the same time brings considerable revenue to the inhabitants. Papers are sometimes baled and saved for the market—much of this work being done by charitable organizations.

In cities from 3,000 to 8,000 the problem begins to assume some of the serious complications met with in the larger cities. These places show that the dump is yet a favorite method. In one instance of a New England town of 8,000 a piggery is maintained at the poor farm, the garbage being collected three times weekly, sterilized before feeding, finally the pigs are sold while young, at prices varying from \$3.00 to \$5.00 per hog. In such places, many of which are growing rapidly, the available dump grounds are fast disappearing. The towns are spreading outside their former limits with the inevitable result—the former dump system is doomed. These cities need an awakening. Incinerators or destructor furnaces which will burn everything, in some instances, give back power as a by-product, should be installed. Rubbish burners as at Dover, N. H. are being used in places where the garbage is retained for hog feed.

The disposal of manure is receiving more attention each season. In the smallest towns no precautionary measures are observed and the pile outside the barn is a familiar sight. But in the larger cities where ordinances are enforced, screened pits are used and manure is hauled to nearby farms frequently. The people should be encouraged and taught to construct these tight pits, screened and covered because of the well known fly breeding propensities.

A troublesome form of waste in the small town coming to my attention this summer, which waste is more of a nuisance than all others, is that produced daily in the grocery and fruit stores. Each day these establishments cast away the decayed or partially decayed vegetables and fruits. Only a few weeks ago I noted one and the same barrel filled with this class of refuse standing for two weeks without removal. It is a strong attraction for flies and rats, and on warm days disseminates an unpleasant sour odor. The lack of a collection system was in this case, responsible for such a condition of things—but the power of the health officer in such cases can be applied even in the absence of a collection system.

From this brief resume it can be seen that the refuse disposal problem in the small towns has not advanced much from the primitive methods except in the cases of the towns having city tendencies. The dump is still the favorite method of disposal for all classes of refuse in

the small town and will remain so, as long as land and places for dumping, exist and so long as no initiative is taken by citizens. Most of the average towns have city ordinances on their books relative to the refuse matters, but that is as far as it goes. The question then arises: "What shall the city do, what kind of disposal can be employed most economically by the small town?"

The dump although not to be recommended or encouraged is a necessary evil in the smallest towns. Lack of finances and a sufficiency of waste land will favor the dump yard. But if the dump is employed a part of the health Officer's business should be to see that it is properly attended and that the people using it exercise care in dumping. The material should be spread out to allow rapid drying and all inflammable material burned. Careless throwing of refuse into yards, in the vicinity of houses, should be discouraged, and where possible, proper drainage should be provided into sewers or drains. The employment of closed cans at the house is essential and should be encouraged.

The burial of refuse, garbage alone or garbage and ashes mixed is found to be a satisfactory method of disposal providing the material is not buried too deep and in too large quantities, moreover, the burial ground should consist of dry porous soil. Shallow trenches about one and one-half feet deep by seven feet in width are suitable and after filling should be covered with a loose covering of about three inches. From experiments carried on in Ohio it can be said that for a porous soil, about one and one-half acres are required to handle one ton of garbage and the same soil can be reused in two years. The burial methods is well adapted to Southern cities where it is warmer but Northern cities also employ it satisfactorily.

Incinerators, destructor furnaces and rubbish burners should be employed in the larger small towns—towns of 5,000 or over. These furnaces are generally made up in units of various tonnage capacity and furnish the only real sanitary, cleanly disposal of all organic decomposing wastes. Incineration should be encouraged and given a boost wherever possible.

SEWAGE TREATMENT

By GEORGE W. SIMONS, JR., Chief of Bureau of Engineering

Tanks for the disposal of sewage do not absolutely purify the sewage as so many people believe. The usual type of tanks commonly adopted by engineers are means of treating the sewage—preparing it for further purification by one of several methods. There are found in the State of Florida, tanks of one or another design, some of the Imhoff type, some of the single story type and in many places where one of these methods is used, the prevailing opinion reigns supreme among the laymen that such installations are "cure alls" and mysteriously remove all impurities from the sewage transforming it into a harmless, purified liquid. The purpose of this article is to briefly correct this existing fallacy.

Sewage as it flows from the household is a complex mixture of several liquids and solids. Some authorities have termed sewage the

used water supply while others designate it soiled water. At best it is a filthy mixture of mineral and organic wastes, from our homes, stores and industrial establishments. This liquid or soiled water supply, contains fats, urine, fecal matter, paper, rags, and numerous other waste material all of which must necessarily be cared for in some manner unoffensive to sight or smell and in such a manner as to remove danger from a public health point of view. For removing these wastes from the household we have modern plumbing installations equipped with house connections to the sewer main. The sewer is the vein system of the city body for removing the wastes as the blood veins in our bodies remove our wastes. This extensive vein or sewer system conveys the wastes as rapidly as possible, causing little nuisance. All pipes and laterals collect at one or several places for final disposal into one of the tank systems—for treatment to make a stable liquid.

Tanks for disposal are merely clarifying agents devices for bettering the condition of the sewage so that its future stability can be assured. During the past few years the Imhoff tank has been receiving a great amount of attention and such installations have been hailed with great enthusiasm by the layman who has hailed it as a purifier and a veritable "Cure-all" for all sewage disposal problems.

The Imhoff tank as well as any other type of tank treatment is only one step in the purification process—truly a valuable and worthy step—but not final. Such tanks if properly designed, constructed and operated are very satisfactory methods of sewage clarification and in many cases are advisable means for adoption. Treatment in an Imhoff tank for instance relieves a large amount of odor and disagreeable sludge handling—in fact, the primary feature of the Imhoff system is its simplicity of sludge treatment.

PURE AIR FOR MOVIE FANS

Is the "movie" show house in your city furnishing you with ample quantity of pure air? There are many poorly ventilated show houses and occasionally one hears the remark, "I would like to see that picture, but the theater is too hot and stuffy."

Prof. Whipple of the Massachusetts Institute of Technology has the following to say on "movie" ventilation:

"A moving picture theatre should first be provided with a good air intake. That is, if possible, the air should not be sucked in directly from the street. Sometimes it is impossible to get very clean air. In such a case what is obtained should be purified, presumably by passing through a wall of pure water. It can, however, be fairly well done by passing it through cotton bags.

"Air which is too cold cannot be taken in advantageously. If you take it in much below 60 degrees it is almost certain to offend some person's bald head. This may be overcome, however, by warming the air with the proper machinery.

"As air is passed into the theatre it must be made sure that the temperature of the clean air is below that already in the theatre in

order that the warmer and less clean air may be naturally forced toward the top and exit.

"In dealing with the air the proper relative degree of humidity, or quality of moisture, should be considered.

"The air ought not to come into the theatre at a speed of more than five feet per second, and at least 30 cubic feet per person should be provided every minute.

"The question of outlets for used air is important. The outlets should be so regulated as actually to get a good displacement of any and all parts where there are persons. Most important is the question of keeping the air moving in order to get rid of the heat put out by the human body.

"The moving picture theatres, in many instances, are placed in comparatively small spaces, considering the number of persons who attend. As this makes less cubic feet of air per person, the problem of ventilation becomes the more delicate and difficult."

The first important work on ventilation was done in the House of Commons in England during the year 1715. In 1723 a French architect, Desaguliers, tried to improve conditions by heating corner chimneys.

Air movement is the essence of air purification—the stagnant air needs wind to move it. Every human body is a "furnace" generating and giving off heat, also a "thermostat" at a constant temperature. The body is also a "humidifier" blowing off moist air 18 times a minute—blowing off air through the lungs and skin. In other words the body gives off heat, and foul products into the air which must be moved away. An environment varies according to the air movement.

When it is known that nearly all the heat that escapes from a building by conduction and radiation passes through the glass windows, one wonders why every window sash is not made with two plates of glass and an air space between.

The ordinances of most large cities require 1,500 cubic feet of air per hour per person for new buildings and 1,200 for old buildings.

People positively refuse to wash in water which others have previously washed in. Then why should any person be compelled to breathe air badly vitiated by some one else? There is no limit to fresh air.

For school rooms it is the standard practice to furnish a sufficient volume of air to give each pupil 30 cubic feet of air per minute, or 1,800 cubic feet per hour.

For advice concerning your needs in ventilation, consult the State Board of Health.

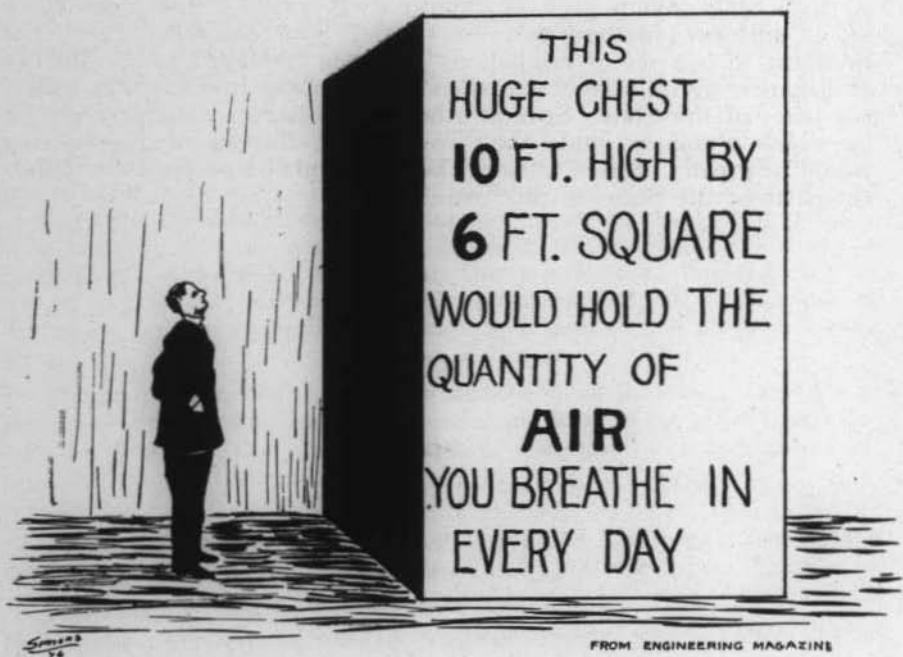
WATER SAMPLING

In many instances an unfavorable interpretation is made of a water analysis because proper methods of sampling was not employed. Enclosed with each sampling bottle, furnished free by the State Board of Health, is a folder giving detailed instructions on how sample should be taken, also in this same folder a number of questions are asked. *It is absolutely necessary that this set of instructions be carried out to the letter—moreover, very essential that the blanks be properly filled out.* Kindly spend a few minutes previous to drawing sample, studying the method and follow it accordingly. Otherwise do not be alarmed to receive an unsatisfactory interpretation.

Extreme care must be used because the slightest variation from the usual procedure might change results.

STATE PLUMBING CODE

In a State that is growing rapidly there exists a vital need for a set of uniform plumbing rules—a reliable State plumbing code. The need for such a set of regulations has been conveyed to the Bureau of Engineering on several occasions by Plumbing Inspectors in different parts of the State. Several other States have a satisfactory code by which plumbers guide their work. The Bureau of Engineering would be greatly pleased to learn the sentiments of people from different parts of the State on this issue.



THIS
HUGE CHEST
10 FT. HIGH BY
6 FT. SQUARE
WOULD HOLD THE
QUANTITY OF
AIR
YOU BREATHE IN
EVERY DAY

FROM ENGINEERING MAGAZINE

Correspondence

REGARDING MEDICAL INSPECTION OF SCHOOL CHILDREN

Sept. 17, 1916.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: Please send any literature you may have on hand in regard to inspection of school children. The routine would be of value. If none, a few words in regard to the routine would help. Does the State Board make a per capita allowance for these examinations, or does it only apply to rural districts?

Respectfully,

Jacksonville, Fla., Sept. 19, 1916.

Dear Doctor: In reply to your letter of the 17th, you are advised that at the last session of the Florida legislature a law was passed, without the knowledge of the State Board of Health, by the terms of which provision was made for the inspection of school children. This law is faulty in many respects, in as much as it limits the number of children under the supervision of one inspector to 2,500, and further provides that appointment shall be made by the Board of County Commissioners, but payment for service rendered must be made out of the State Board of Health funds. No provision was made for a special appropriation to cover the cost of this work. Under these conditions, and in order to avoid serious hampering of other important work of the Board, it was found that 10c per capita was all that could be paid for such inspection. Under separate cover I am mailing you a copy of this law in order that you may become familiar with its provisions. The appointment of school inspectors must be made by your Board of County Commissioners, and approved by the State Health Officer.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

EXAMINATION OF MILK BY STATE LABORATORIES

Sept. 17, 1916.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: What suggestion could you make for the examination of milk when there is no local laboratory or necessary outfit?

Yours very truly,

Jacksonville, Fla., Sept. 19, 1916.

Dear Doctor: In reply to your letter of the 17th, you are advised that this Board will be very glad indeed to handle the examination of milk for you, in the central laboratory or any of the branch laboratories. Such examinations, however, are made only for municipalities and not for individual dairymen. In the event that you wish such analyses made, samples should be collected from all dairies supplying milk in your city, these samples being collected and shipped in accordance with instructions which will be issued from this office upon request.

Assuring you of any further information or assistance which I may be able to give you, I am,

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

SUSPECTED TUBERCULOSIS

Sept. 1, 1916.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: Replying to your letter, I wish to advise that this patient was supposed to be suffering with tuberculosis of 4½ years standing, and after coming to Florida seem to get better for about two years and then worse again. Now, what it is we don't know, and would like to find out whether or not it is tuberculosis.

Yours very truly,

Jacksonville, Fla., Sept. 2, 1916.

Dear Madam: In reply to your letter of the 1st, I would suggest that the doubtful case of tuberculosis be required to send a specimen to the laboratory of the State Board of Health for examination, in order to determine the presence of the germs of consumption. It is true, however, that in many cases in the early stages of the disease, the laboratory examination does not prove positive even though the disease is present. Repeated examinations should, therefore, be made and in addition, it is advisable to consult a competent physician and allow him to make a complete physical examination of the patient. I am today sending you two containers in which specimens of the sputum may be mailed to our laboratory at Jacksonville for examination.

Yours very truly,

(Signed) Joseph Y. Porter, State Health Officer.

TERMINAL FUMIGATION

Sept. 16, 1916.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: Kindly advise me just what to use and how, in order to actively and surely fumigate and disinfect a house and office in which a case of tuberculosis terminated. I am by circumstances obliged to occupy this place and wish to protect myself and family. If possible, kindly name two or three effective materials as I may be able to obtain one more easily than another.

Thanking you in advance,

Yours very truly,

Jacksonville, Fla., Sept. 18, 1916.

Dear Sir: I have your letter of the 16th inquiring as to the best method of fumigating the house and office in which a case of tuberculosis terminated. In reply you are advised that fumigation is of very little if any value because of the fact that to be effective the room must be practically air tight, and the gas must be forced in under pressure. Such a procedure requires an elaborate appliance which of course it is impossible for you to secure. I would suggest that by far the best means of disinfection would be a thorough mechanical cleaning of the quarters. All bed linen, cooking utensils, dishes and other articles of a similar nature used by the patient should be boiled for at least thirty minutes. Floors, walls, woodwork and furniture should be thoroughly scrubbed with hot soap suds, and if you desire they may be wiped off with a solution of carbolic acid or a 1 to 1,000 solution of bichloride of mercury, after which the windows and doors should be opened and the quarters allowed to air and sun thoroughly for several days. These precautions observed, you need have no fear of infection from this source.

Very truly yours,

(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

LESS MOSQUITOES IN NEW SMYRNA

Have you noticed how many less mosquitoes there have been in and around New Smyrna this summer than usual? I have heard it remarked many times lately that the absence of insects has been very noticeable this summer season, and it is my honest opinion, as well as the opinion of many other persons, that the work done under the direction of Dr. Heck, Assistant State Health Officer, last spring has had a whole lot to do with causing the noticeable absence of insects this year. The work done by Dr. Heck is not entirely responsible for this condition, but it gave the right start, and Josh Blount as sanitary inspector for the city has been carrying out the instructions left with him by the health officer. It is a simple matter to be rid of mosquitoes, and it doesn't require a lot of time and energy to keep tanks covered and destroy the breeding places of these insects. We can have this same condition next summer, the summer after and every following summer if the citizens will take the time and trouble to destroy these breeding places. It seems that the most necessary thing is to have somebody going around with a big stick all the time pounding instructions into the hard heads of some people what they should do for their own good, but there are still a few people here who refuse to enhance the common good by complying with the regulations, and openly defy the inspector and city council. The putting on of the sanitary inspector is one of the best moves the city council ever made.—New Smyrna News.

JASPER PAID VISIT FROM PUBLIC HEALTH NURSE

Mrs. F. A. Scott, district public health nurse for the State Board of Health, spent several days in the city last week on a tour of inspection. She was well pleased with the action of the Jasper city council in abolishing the open closet and other sanitary regulations in reference to the general health of our community. Mrs. Scott was well pleased with our town, and paid it the high compliment of being one of the cleanest in the State. This lady is thoroughly in love with her work, and with other members under the supervision of the State Board accomplishes much good in a sanitary sense.

Few of the citizens of the State can hardly realize the great benefit derived from the work of the State Board. Dr. Porter, its eminent president, has few equals in any State in the Union, and no superiors. He has an able corps of assistants, all laboring incessantly for the public weal, and too much attention cannot be given the golden advice sent to those of us who know not how to live.

The Board's health train will visit us later on, and every man, woman and child should see it and absorb the lessons that it will teach. It is interesting to note that the expense of equipping this health train was borne from the health board's regular appropriation, costing the State not an extra penny.—Hamilton County Banner.

HAS DADE COUNTY NO PITY?

Has the City Board of Health any authority to deal with cases of tuberculosis? And would this authority extend to the county jail?

The questions are suggested by a report that there are several cases of tuberculosis in the county jail, where crowded conditions are such that practically all prisoners are exposed to contagion. Is there nothing that the city health authorities can do in the matter?

A few years ago tuberculosis was not known to be highly contagious nor curable. Today both of these facts are known.

A few years ago it would have been considered criminal to permit persons—even miserable prisoners in the jails—to be exposed to the disease. Today, intelligent people know that such negligence is criminal, and that every prisoner who is exposed to the disease has a grievance against the people of Dade County as grave as if the county authorities were deliberately feeding them poison.

"When the new jail is finished"—that mythical jail of the bye-and-bye—prisoners will not have to be herded like ill-kept animals, it is promised. But even then, are prisoners with tuberculosis to be kept in cells that are occupied or may be occupied by other prisoners?

It is a serious question—too serious not to arouse the pity of the people, as well as action among those who have the power to remedy the situation.
—Miami Metropolis.

NO LONGER A BOGIE

Two cases of yellow fever have been discovered on an incoming ship by the United States health officers at Quarantine, a hundred miles below New Orleans. The patients were immediately isolated, the ship quarantined, and the world informed.

What a commonplace story! And yet there was a time when the mere mention of the name "yellow fever" was enough to strike terror into the hearts of the strongest!

That was when yellow fever was not understood; before the mosquito theory was demonstrated; before the treatment was known; before the might of publicity was directed against a disease which is the offspring of ignorance and darkness.

A little extra vigilance on the part of quarantine physicians—at all Southern ports—that's all the discovery of a case or two of yellow fever means nowadays, for the treatment is understood and is very simple, and with the patient isolated in a screened room, the possibility of the infection spreading is eliminated—Pensacola Journal.

Summary of Public Health Administration, August

WEST COAST DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Differential diagnosis in reported infantile paralysis case, at request of attending physician. Investigation regarding dairy complaint.

Port Tampa: Sanitary inspection of town. Inspection of stores and investigation regarding health conditions.

Clearwater: Sanitary inspection of town. Stores inspected. Conference with city clerk regarding vital statistics.

Largo: Sanitary inspection of town. Stores inspected. Interview with local board concerning health conditions.

Dunedin: Sanitary inspection of town. Investigation of health conditions and inspection of stores. Interview with Mayor relative to health matters.

Plant City: Sanitary inspection of town. Investigation of health conditions and inspection of stores for Screening law.

Knights Station. School at Knights Station inspected.

Dade City: Sanitary inspection of town. Conference with Mayor concerning vital statistics.

Zephyrhills: Inspection of school.

Brooksville: Sanitary inspection of town; stores inspected to ascertain if complying with Screening Law.

Bradentown: Interview with local Registrar in regard to vital statistics.

Tarpon Springs: Sanitary inspection of town. Letter written to city health officer regarding certain violations of health laws, and matter taken up with city health officer. Stores inspected. Personal interview with store owner not complying with Screening Law; also taken up by mail.

WESTERN DISTRICT

Pensacola: Routine work, office of the Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections of trains coming in to city from north account infantile paralysis. Supervision of inspections by sanitary patrolman as follows: Screening Law, boarding houses 2, restaurants 4, kitchens 2, meat shops 1, grocery stores 2, fruit stands 4. Surface Closet and Water Carriage Laws, private residences 6. Sanitary Nuisance Laws, hog pen in city 1. Abatements ordered 21. Communicable Diseases, typhoid fever 5, tuberculosis 3. Fumigations, releases, etc. 3.

SOUTH EAST COAST DISTRICT

Key West: Routine work, office of the Assistant to the State Health Officer. Routine laboratory work. Aug. 8-31, leave of absence on account of sickness.

SOUTH CENTRAL DISTRICT

Lakeland: (Assistant to the State Health Officer out of district on special work).

CENTRAL DISTRICT

Ocala: Routine work, office of the Assistant to the State Health Officer.

Inverness: Interview with officials regarding vital statistics.

Bushnell: Interview with officials regarding vital statistics.

Starke: Interview with officials regarding vital statistics.

Floral City: Investigation epidemic intestinal disorder, diagnosed amoebic dysentery. Instructions given to families concerning methods of contagion and methods to prevent infection.

Lawtey: Investigation case of typhoid fever.

Jacksonville: Inspection of children on trains from without the State account infantile paralysis epidemic in North.

NORTH CENTRAL DISTRICT

Live Oak: (Assistant to the State Health Officer out of district on special work).

NORTH EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer. Inspection of dairy. Communication with attending physician relative to alleged cases of diphtheria at Bunnell and Volusia.

Jacksonville: Interview with State Health Officer on official business.

Fernandina: Sanitary inspection of town.

Callahan: Sanitary inspection of town.

Hilliard: Sanitary inspection of town.

South Jacksonville: Sanitary inspection of town.

Mayport: Sanitary inspection of town.

Pablo Beach: Sanitary inspection of town.

Orange Park: Sanitary inspection of town.

Green Cove Springs. Sanitary inspection of town.

WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer. Treatment of indigent hookworm cases; assistance to local physicians in administering Pasteur treatment and giving anti-typhoid vaccine. Inspection to see that sanitary laws observed. Assistance to Sanitary Engineer of State Board of Health in inspecting sewerage system of Tallahassee and in obtaining necessary data on subject.

Marianna: Sanitary inspection of town.

Blountstown: Sanitary inspection of town; conference with city health officer and local physicians regarding health matters.

Sanborn: Conference with attending physician relative to diagnosing case of pellagra.

Bristol: Sanitary inspection of town; conference with local physicians regarding health matters.

Sirmans: Called to diagnose eruptive disease; impossible to do so, as patients buried and no more cases.

Greenville: Sanitary inspection of town.

INSPECTION OF CHILDREN ACCOUNT POLIOMYELITIS

Jacksonville: Inspection of children on inbound trains from North, and under observation at destination: 2 Assistants to the State Health Officer, 2 District Public Health Nurses.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during August: none. Total number towns visited in 1916 to September 1.....121

PUBLICITY AND PUBLICATIONS

Monthly Bulletin "Health Notes," Vol. XI, No. 8, August, 1915, pp. 28. Press Service Bulletins to Florida newspapers: August 2, "Cleanliness and Disease;" August 9, "Who is Responsible?"; August 16, "About Eating;" August 23, "Summer Comfort;" August 30, "Unused Opportunity."

Publications out in August: Publication 167, "What You Should Know About Tuberculosis," pp. 32.

DISTRIBUTION OF LITERATURE DURING AUGUST

Mailed upon request..... 1,363
Press Service bulletins to Florida newspapers (5 issues)..... 1,375
Health Notes, August, mailing list.....10,600

Total number pieces distributed.....13,338
Number pieces literature distributed Jan. 1 to Sept. 1, 1916.....135,172

SMALLPOX

Reported cases of smallpox in Florida, August, 1916:.....none
 Total number cases reported in 1916 to September 1..... 87

DISTRICT TUBERCULOSIS NURSE INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, Month Ended August 31, 1916

<i>Residence of Cases Visited to Date by Districts</i>	<i>Total Number of Cases Under Instruction Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Cases in District Under instruction to Date</i>	<i>Total Number of Cases Following Instruction</i>
District No. 1.....	82	5	2	..	..	85	46
District No. 2.....	44	..	..	..	..	44	19
District No. 3.....	135	12	4	3	2	138	78
District No. 4.....	75	23	7	5	4	84	53
District No. 5.....	138	22	9	11	2	138	100
District No. 6.....	174	16	..	2	..	188	156
District No. 7.....	..	45	..	..	..	45	38
District No. 8.....	39	48	2	..	..	85	52
District No. 9.....	154	14	6	9	2	151	151
District No. 10.....	132	19	5	1	2	143	84
District No. 11.....	60	27	6	4	..	77	52
District No. 12.....	149	34	19	20	7	140	140
Colored cases visited by colored nurse							
Tampa	28	34	5	2	1	54	54
West Tampa .....	..	2	..	..	..	2	2
Plant City .....	..	14	..	..	..	14	12
Total for State	1,210	315	65	57	20	1,388	1,037

BIOLOGICAL PRODUCTS

Distribution of Biological Products during August (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only). Number of persons receiving treatment:

<i>County and Town</i>	<i>Anti-Smallpox Vaccine</i>	<i>Anti-Rabic Vaccine</i>	<i>Anti-Typhoid Vaccine</i>	<i>Diphtheria Antitoxin Curative and Immunizing</i>	<i>Tetanus Antitoxin Immunizing</i>
ALACHUA					
Alachua .....	..	..	..	1	..
COLUMBIA					
Lake City .....	..	..	1	..	..
DADE					
Miami	2	..	..	..	..
Perrine	10	..	..	..	..
DUVAL					
Jacksonville	69	2	41	..	1
Mayport	10	..	..	..	..
ESCAMBIA					
Pensacola .....	..	..	4	2	..
FRANKLIN					
Apalachicola .....	..	..	8	..	..
HILLSBOROUGH					
Tampa	200	..	..	1	..
JACKSON					
Sneads .....	..	..	10	..	..
LEON					
Tallahassee .....	..	5	..	..	..
MADISON					
Madison .....	..	..	..	1	..
MARION					
Ocala	10	..	..	..	..
MONROE					
Key West	30	..	3	1	2
ORANGE					
Orlando	10	..	..	..	..
POLK					
Bartow .....	..	..	..	7	..
SAINT JOHNS					
Hastings .....	..	..	..	2	..
St. Augustine	100	..	..	1	..
ST. LUCIE					
Fort Pierce	30	..	..	..	..
Sebastian	20	..	..	..	..
SUWANEE					
Live Oak .....	..	..	10	..	..
VOLUSIA					
Daytona	10	..	10	..	..
New Smyrna	100	..	..	..	..
WALTON					
DeFuniak Springs .....	..	..	26	..	..
Total	601	7	113	16	3

Total number persons receiving anti-smallpox vaccine in 1916 to Sept. 1.....4,356
 Total number persons receiving Pasteur treatment in 1916 to Sept. 1..... 42
 Total number persons receiving anti-typhoid vaccine in 1916 to Sept. 1..... 720
 Total number persons receiving diphtheria antitoxin in 1916 to Sept. 1..... 107
 Total number persons receiving tetanus antitoxin in 1916 to Sept. 1..... 9

CRIPPLED CHILDREN

NAMES								Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment Sept. 1, 1916
	In St. Luke's, 8-1-16	In Brewster (Col.) 8-1-16	Outside Treatment 8-1-16	Application Received	Admitted St. Luke's	Admitted Brewster	Admitted for Office Treatment				
							Examined, not Admitted				
							Total Cases During Month				
F. P.	1						1	Daily Dressings		Tbc Spine	1
H. M.	1						1	Daily Dressings		Tbc Ilium	1
R. W.	1						1	Massage and gymnastics		Spastic Paralysis	1
A. F.	1						1	Daily Dressings		Periostitis	1
W. W.		1					1	Daily Dressings		Polio Paralysis	1
B. K.	1						1	Braces fitted 14th	Cured 8-14-16	Clubfoot	1
O. D.	1						1	Transferred outside	8-6-16	Tbc Spine	1
F. B.										Ankylosis knee	1
A. T.	1						1	Daily Dressings		Osteomyelitis	1
H. R.		1								Tbc Hip	1
I. T.	1							Cast foot & leg 17th		Spastic Paralysis	1
Total	8	3					11		1		10

BACTERIOLOGICAL LABORATORIES

SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Total
Animal Parasites	294	123	38	..	14	469
Diphtheria	147	64	14	..	4	229
Gonorrhoea	106	37	69	..	15	227
Malaria	283	175	58	8	24	548
Pathological	5	10	3	..	3	21
Rabies	5	..	..	..	2	7
Tuberculosis	120	87	25	1	12	245
Typhoid	326	134	58	..	20	538
Water: Bacterial Ex.	51	21	6	..	24	102
Wassermann	380	93	10	..	15	498
Miscellaneous	49	38	46	3	68	204
	1,766	782	327	12	201	3,088

Total number of specimens examined by the Laboratories of the State Board of Health during August, 1916.....3,088

Tallahassee Laboratory closed during August.

[illegible]

(MALARIA)

TOWN	Diphtheria	Gonorrhea	Etiocautummal	Quartan	Terian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Rabies	Ascaris	Trichiuris	Tapeworm	Ameba	Wassermann	Strongyloides	Total
Raiford							1										1
River Junction									5								5
St. Augustine		1							1								1
St. Petersburg																	1
San Antonio																	5
Sanford	1							1	2				1				5
Seville									4								4
Sneads							2										2
Springdale									1								1
Starke									2	1							7
Tallahassee						1	2		2				1				7
Tampa	2	8					10	12	6		4	9			17		70
West Tampa												1					1
Tarpon Springs															1		1
Torrey									2								2
Umatilla									1								1
Wauchula	1						1	1									3
Webster								1									1
Wellborn	1								1								2
Wildwood							1										1
Williston									2								2
Winter Haven															1		1
Zolfo								1									1
Total	38	65	2		14	7	57	35	154	2	7	22	4	3	170	2	582

BUREAU OF VETERINARY SCIENCE
TICK ERADICATION

Cattle dipping vats reported constructed during August, 1916:

Duval County	3
DeSoto County	1
Total number of vats reported constructed to Sept. 1, 1916	119

GLANDERS

Diagnosed by Veterinarian during August, 1916:

Jacksonville, Duval County	1 horse, \$75.00
Sanford, Seminole County	1 horse, \$75.00
Total number of cases in 1916, to September 1	12

IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 125; mules, 234; cattle, 208; hogs, 49; goats, 33.....649

EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 2; mules, 2; cattle, 1517.....1521

INTRASTATE SHIPMENTS OF LIVE STOCK TO DADE COUNTY

Horses, 10; cattle, 42.....52

VETERINARY INSPECTIONS FOR THE MONTH OF AUGUST

Construction of dipping vats and education work in tick eradication in Escambia County; August 1-2, construction of vat, Escambia County; August 1-2, preparing dip and dipping cattle, Mt. Verde; August 1st, near Jacksonville, glanders test of horse; August 3rd, investigating glanders, Dade City; August 3-4, preparing dip and dipping cattle, Fruitland Park; August 3rd-14th, construction of dipping vat, Pensacola; August 6th to 7th, Investigate tick infested cattle, Miami; August 9th, Investigate disease in cattle and mules; August 9th to 11th, Vaccinating hogs, Morriston; August 11th, Dipping cattle South Jacksonville; August 11th, Mad Itch in cattle; Cottondale; August 12th, Disease in cattle, DeFuniak Springs; August 13th, dipping cattle, Jacksonville; August 15th, investigating glanders, Sanford, August 15th to 17th, construction of dipping vat, Cottage Hill; August 17th, dipping cattle, Baldwin; August 18th, disinfecting cattle pens at Stock Yards, Jacksonville. August 18th to 21st, construction of dipping vats, Bratt; August 22nd, testing cattle for tuberculosis, Jacksonville, August 22nd to 29th, construction of dipping vats, Baggett's Farm; August 23rd, dipping cattle for shipping, Jacksonville; August 24th and 25th, preparing dip and shipping cattle, Live Oak; August 24th, dipping and shipping cattle, Jacksonville; August 29th to 31st, construction of dipping vat, Escambia County; August 30th, dipping and shipping cattle.

Veterinary Notes

THE INTERTRANSMISSIBILITY OF TUBERCULOSIS

By Chas. F. Dawson, M. D., D. V. S.

Veterinarian to the State Board of Health of Florida

Since the researches of Dr. Theobald Smith in 1896 and 1898 on the biology, morphology, and pathogenesis of bovine and of human tubercle bacilli, the study of the intertransmissibility of tuberculosis has assumed great importance.

Following the work of Smith came the now famous declaration of Koch, denying the unity of human and bovine tuberculosis, and also doubting that they are intertransmissible.

The scientific world was at once moved to take notice of these statements, and commissions were appointed to investigate the correctness of Koch's assertions. If the Koch idea could be shown to be well founded, it was evident that sanitary measures restricting the sale and movement of tuberculous animals and their products were unnecessary, and that they were harmful to the cattle industry. More important still was the probable removal of apprehension concerning the influence of diseased animals and their products upon the public health.

It has now been about seven years since Professor Koch first agitated the question of the intertransmissibility of tuberculosis in a memorable address before the British Congress on Tuberculosis.

A summation of the views of various authors shows a preponderance of opinion against Koch's theory. Indeed, it would seem that while Koch's statements have generally failed to create converts to his theories, they have served to call the attention of the whole professional and lay world as well to the great prevalence of cattle tuberculosis, and to the question of its transmission to man. Therefore, the agitation has been productive of an immense amount of good, and has served to interest our lawmakers, who, heretofore, have generally regarded the question with suspicion, and those who agitated it as faddists. Of equal importance has been the effect of Koch's statements upon the scientific world. Coming, as they did, from such an eminent authority on tuberculosis, pathologists at once began to investigate tuberculosis with renewed vigor and from every conceivable standpoint. So that today this terrible scourge of man and of our principal meat-producing animals is receiving the attention from pathologists that its tremendous importance demands.

It is admitted by all authorities that bovine tuberculosis is rapidly increasing in extent in civilized countries. In the United States it is impossible at present to present accurate statistics, owing to more or less laxity in the enforcement or absence of law for protecting the health of persons and of animals. Enough is known, however, to cause us to view with alarm the probable effect upon the public health by the disease if it is allowed to continue its ravages. Statistics seldom give a correct idea of the prevalence of diseases. This is particularly true of the statistics of tests for tuberculosis in the United States, for the reason that the tests are generally made in herds where there is reason to suspect the disease is present. Were all cattle tested indiscriminately, it is probable that the percentage of cases would be materially reduced. In Massachusetts, where 24,685 cattle in suspected herds were tested, 12,443, or 50 percent, were found tuberculous. In the same State, 4,093 cattle in non-suspected herds furnished 1,080 reactors, or showed only 26.4 percent tuberculous animals. In experiment station tests in suspected herds 115 out of the 323 head that were tested proved tuberculous—a percentage of 35.6. In non-suspected herds 84 out of 935 head proved tuberculous, or only 9 percent.

At present the disease is confined largely to dairy cattle, as is shown in our Federal statistics for the year 1900, in which nearly 5,000,000 inspected carcasses of beef animals showed only about 0.11 percent tuberculous.

Statistics also show that the disease prevails in swine in proportion as they come in contact with infected cattle. In fact, swine tuberculosis is now taking high rank as the most important swine disease which may affect the public health. In swine the disease is usually generalized, and thus more edible portions of the carcass consumed, and the chances of infection are to this extent increased. Porcine tuberculosis is found most prevalent in hogs fed on dairy refuse from infected dairy cattle, and where they have access to cattle manure. That swine readily contract tuberculosis from the ingestion of artificially infected milk, from feeding behind cattle affected with natural tuberculosis, from feeding behind cattle affected with tuberculosis by drinking artificially infected water, and by the subcutaneous injection of virulent tubercle bacilli, has been demonstrated by Schroeder and Mohler, of the Bureau of Animal Industry. The same authors demonstrate that the feces of a tuberculous cow are more certainly infectious than her milk. This is true because the lungs are more often the seat of the disease than is the udder, and because it has been shown that tubercle bacilli are swallowed by cattle instead of being coughed up and expectorated, and that they pass through the bovine digestive canal and are discharged with the feces without having lost their original virulence.

We are thus brought face to face with the fact that when a cow's lungs are sufficiently involved to cause her to discharge tuberculosis bacilli, she becomes a disseminator of tuberculosis, regardless of the question of her udder being diseased. The fact that there is extreme care, as regards cleanliness, in milking operations about such animals is no guarantee that the milk is free from tubercle bacilli.

Not only is the public health menaced by the presence of tubercle bacilli in fresh dairy products in which they retain all their original virulence, but it has been shown by several investigators that tubercle bacilli live and retain their virulence for several months in ordinary butter. The writer conducted an experiment in which it was shown that tubercle bacilli retain their original virulence in ordinary butter for a period of three months, and even after a period of eight months the same butter was capable of producing the disease in guinea pigs.

We thus see that one cow in a herd may affect her calf by the bacillus-laden manure which soils her teats and adjacent parts; that this manure may infect the milk; that her milk, when added to the milk of perfectly healthy cows, will infect the whole supply from that herd.

Schroeder has shown that it requires only a single nursing of a tuberculous mother-cow to infect her offspring. He allowed three suckling calves to nurse a tuberculous cow one, three, and seven days, respectively. A fourth calf was fed the milk from a pail for thirty days. All other sources of infection were excluded. All four calves contracted tuberculosis.

A single tuberculous cow that is passing the bacilli in her feces will infect a whole stable sooner or later. Her manure, mixed with that of healthy individuals, will infect the whole manure pile, and this, if swine have access to it, will become infectious for them.

If, as Koch claims, man cannot contract tuberculosis from the lower animals, our interest in the matter, outside the question of the palatability of tuberculous meats and dairy products, would be confined largely to the inconveniences of a restricted diet and of financial losses. However, the preponderance of evidence favors the view that all forms of tuberculosis, from that found in man even to that found in cold-blooded animals, are identical. That the variant types of tubercle bacilli are the product of environment receives confirmation from our laboratory experiences with the pathogenic bacteria, which all workers know show variations in morphology, biological properties, and pathogenesis, according to the medium, age of culture, passage through various animals, and other environmental influences of which we are probably now ignorant.—From a paper read before the Sixth International Congress on Tuberculosis, Washington, 1908.

(To be continued)

Lincoln
Said;

*'you can't fool
all the people
all of the time.'*




*It's a good
thing that the
medicine fakirs
can't.*



"GET THEE BEHIND ME, SATAN"

CHAS. VAN OLFEN

FLORIDA



HEALTH NOTES

OFFICIAL BULLETIN

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BRANCH OFFICES

BACTERIOLOGICAL LABORATORIES

ASSISTANTS TO THE STATE HEALTH OFFICER

CENTRAL LABORATORY

Tampa Key West St. Augustine
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BRANCH LABORATORIES

AGENTS
Miami Fernandina Palatka

Tampa Pensacola Miami
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.
- Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.
- Publication 158, Malaria, April, 1916, pp. 4.
- Publication 159, Some Poultry Pests, April, 1916, pp. 10.
- Publication 160, Annual Report State Board of Health of Florida, April, 1916, pp. 256.
- Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).
- Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.
- Publication 163, Hog Cholera, pp. 30.
- Publication 164, Annual Report of Veterinary Department, 1915, Reprint from 27th Annual Report of the State Board of Health, April, 1916, pp. 56.
- Publication 165, Annual Report of Crippled Children Treatment, 1915, Reprint from 27th Annual Report State Board of Health, April, 1916, pp. 6, illustrated.
- Publication 166, Vital Statistics, 1915, Reprint from June, 1916, Health Notes, pp. 44.
- Publication 167, What You Should Know About Tuberculosis, Aug., 1916, pp. 32.
- Publication 168, "A Health Sermon," Reprint from June, 1916, Health Notes, pp. 6.

"FOLLOW THE LEADER"

Many of us older "grown-ups" have played the game of "Follow the Leader," and I dare say, remember the fun with an enjoyment that years have not effaced. But the below suggestion from the Municipality of Chipley, Florida, is an invitation of another kind to "Follow the Leader" which the NOTES wishes every city government would adopt and make a "grown-up" play of intense interest to its citizens.

Let every town of any pretentious size in the State,—and it would be "les majeste" the NOTES supposes, to even hint that any community is not pretentious in its desires for better health and cleaner surroundings—adopt the method which Chipley has in bringing before its citizens in a concise and terse way, what the statutes of the State require. Furnish these little leaflets to every merchant in the town. Ask to have one wrapped with every purchase made by any one, white or black. Get the people to THINKING. If the people can be induced to think about sanitation and health methods and health improvements, action will soon come to make the town or city a better place to live in, and a healthier spot to bring up a family.

Indifference to environment means dirt and disease. Carelessness in observing needed requirements for disposal of human filth and other domestic wastes assuredly means, and will bring, sickness. Go at informing the people in the town in which you live in a businesslike manner, as the officials of Chipley are doing, and then note the improvement, not only in the mortality rate, but also the morbidity—the sick rate.

The NOTES doffs its "head gear," even if it is somewhat worn from summer use, to Chipley and ALL OTHER municipalities of Florida who will treat the health question of their communities as a business one and will give to health its true commercial importance. It is an asset to the growth and development of every branch of industry of an intelligent community. Think about it and then ACT.

One Moment, Please.

By an act of the Legislature approved May 15, 1915 and Chapter 6836 of the Laws of Florida provides with reference to screening and making all surface closets fly proof, as follows:

1. The roof shall be water tight.
2. The house shall be without cracks through which flies may enter.
3. The door shall fit closely and shall be self-closing.
4. The seat shall have self-closing, hinged covers over each opening.
5. The vault shall be closed by a tightly fitting hinged door.
6. All openings for ventilation, etc., shall be screened with wire netting.

An ordinance of the Town of Chipley also provides that all surface closets shall be fly-proof.

All citizens are urged to comply with the laws at once as penalties are provided for the violation thereof.

A. I. MILLER,
Mayor of Town of Chipley

Approved:
Dr. W. Coleman,
Health Officer.

(Dr. C. V. Chapin, the efficient and intensely practical Health Officer of Providence, R. I. offers most excellent advice in the following article. The Notes hopes that those who read will profit by the Doctor's admonition of caution.)

WHY THE HEALTH DEPARTMENT URGES CLEANLINESS

The Health Department distributes to children in the primary schools leaflets which teach them not to put pencils in the mouth, not to drink from the same glass with others, and not to spit on floor or sidewalk. Pupils in the grammar and high schools ought to know why it is that the health department wishes every one to acquire habits of personal cleanliness. The health department is very much interested in this because habits of cleanliness prevent the spread of contagious diseases. Typhoid fever, scarlet fever, diphtheria, measles, mumps, chicken pox, whooping cough, tuberculosis, pneumonia and influenza or grip are all common contagious diseases. The germs of typhoid fever are in the excrements. No one will get typhoid fever unless some of the excretions of a typhoid patient get into his own mouth. Sometimes people get typhoid fever by drinking milk or water which some one has carelessly infected, but far more people get typhoid fever because they go directly from the water-closet to their dinner without washing their hands, or put the fingers to the lips just after they have come from the privy. The germs of all the other diseases named above are discharged from the body in the fluids of the mouth and nose. No one will catch any of these diseases unless some of the saliva from the mouth, or mucus from the nose, of another gets into his own nose or mouth. Germs do not fly about and do not live long when dry. If one catches a contagious disease it is usually because he has put another's spit in his own mouth. That does not sound very nice but that is what you are likely to do every time you drink out of a glass used by others, every time you wet a pencil in the mouth, put string, pins, nickles, transfer tickets in the mouth, or moisten your fingers to turn the leaves of a book, or put the fingers in the mouth or nose for any purpose, or for no purpose. Watch people and see how busy they are, in those and dozens of similar ways, in spreading their saliva on everything around them. And then watch yourself, and, unless you have already trained yourself to habits of neatness, you will see that you are industriously trying to put other people's saliva into your own mouth. Would it not be a good plan to try and stop this continual "swapping" of the secretions of the body? Perhaps some one will say that there is no need of being careful all the time, and that it is only necessary when one is near those who are sick with these diseases. But that is not so. Most school children know something about diphtheria cultures. They know that the inspector often finds germs in people long after they are recovered from diphtheria, and often in those who have not had the disease at all. Germs often grow in people without making them sick. Sometimes it is because they have had the disease before, and sometimes it is for other reasons. But these same germs planted in other persons may make them very sick. You can never know whether the persons with whom you are, are

carrying disease germs in mouth or nose. If you do not wish to catch diphtheria, or scarlet fever, or tuberculosis or other contagious diseases, let no one's saliva get into your own mouth.

Every one is, of course, anxious to avoid catching these diseases, and ought to be still more anxious to avoid giving them to others. We do not know whether we may not at any time be carrying the germs of disease in our own mouths, so we all ought, at all times, to be very careful not to distribute our saliva where it can come in contact with another.

Providence, September, 1910.

PHYSICIANS PLEASE TAKE NOTICE

To avoid an almost endless amount of correspondence, physicians of the State will please observe and bear in mind, that when ordering Pasteur treatment two things are absolutely necessary:

First, the age and sex of the child or person bitten and the location on the body of the bite, must be stated in the telegram.

Second, a check for \$20.00 should be immediately transmitted by mail to the office of the State Board of Health, or if the physician and parent both certify that the case is one of indigency an application for a blank for that purpose should be obtained, filled out and returned to the office of the State Board of Health as soon as possible.

The Pasteur treatment can be obtained direct from Mulford & Company, Philadelphia, Pennsylvania if the attending physician wishes to order it that way, but it will cost nearly, if not quite, double the amount than when obtained through the State Board of Health, and must be paid for when ordered as the State Board of Health assumes no money responsibility for the treatment when ordered other than through the Executive Office of the Board.

It is hoped that the physicians of the State will bear this request in mind and thus save the Executive Office an unreasonable amount of correspondence, for in nine cases out of ten, two or three letters have to be written to doctors to find out whether the case is one of indigency. There is no sensible reason why persons who are able to pay for this treatment should not do so, no more than for diphtheria antitoxin, quinine or compound cathartic pills, or, in fact, any other medicine or remedial agent.

ANONYMOUS COMMUNICATIONS

The NOTES wishes to again invite the attention of its readers to the fact that correspondence bearing no signature, cannot be published. Names will be withheld, but it is necessary in submitting letters or articles for publication, that they bear the signature of the writer.

YOUR HEALTH DEPENDS ON WHAT YOU EAT

"After all," says a bulletin from the State Board of Health, "good health is largely a matter of what goes into the stomach. If a person eats heavily of rich, greasy concentrated foods, such as fried meats, rich pastries, soggy or underdone breads, he will soon find himself seeking a relief from headache, sluggishness, constipation, and biliousness, and the patent medicine route will be the way he will likely choose. Pills, purgative and most any patent medicine will find a hearty welcome and become a warm friend to persons who so poison themselves. The trouble arising from eating food of this kind is that it ferments in the stomach, throws off poisons and creates a condition which calls for a stronger poison in the form of medicine to throw off the food poison. The patent medicine habit is acquired and the digestive organs of the stomach are wrecked and no longer perform their natural functions.

"On the other hand, whoever eats freely of fruits, vegetables, milk, butter, salads, cereals and nuts—foods prepared by nature for man—not only avoids digestive troubles but he is spared the evil effects of food poisons, such as rheumatism, headaches, sluggishness, and biliousness. He also escapes the patent medicine habit. He eats according to nature's demand and needs and no medicine is required as an after dose."—*Press Service, North Carolina State Board of Health.*

DEFECTIVE TEETH IN SCHOOL CHILDREN

A recent investigation made by the U. S. Public Health Service in connection with studies of rural school children showed that 49.3 per cent had defective teeth, 21.1 per cent had two or more missing teeth, and only 16.9 per cent had had dental attention. Over 14 per cent never used a tooth brush, 58.2 per cent used one occasionally and only 27.4 per cent used one daily. Defective teeth reduce physical efficiency. Dirty, suppurating, snaggle-toothed mouths are responsible for many cases of heart disease, rheumatism, and other chronic affections. The children are not responsible for the neglected state of their teeth. The ignorant and careless parent is to blame for this condition—a condition which hampers mental and physical growth and puts a permanent handicap on our future citizens. School teachers can and are doing much in inculcating habits of personal cleanliness on the rural school child but this will fail of the highest accomplishment unless parents co-operate heartily and continuously. This is a duty which we owe our children.

Health Briefs

Smallpox is wholly preventable.

"Mouth breathing" makes children stupid.

Moderate exercise in the open air prolongs life.

The full dinner pail is the enemy of tuberculosis.

Fish cannot live in foul water nor man in foul air.

Procrastination in sanitary reform is the thief of health.

America's typhoid fever bill is more than \$270,000,000 a year.

The Constitution of the United States doesn't mention health.

Railway cars would be sanitary if it weren't for the people in them.

Not everybody can achieve greatness but everybody can be clean.

It is dangerous to put anything into the mouth except food and drink.

If you sow a hygienic habit you reap health—reap health and you attain longevity.

The continuous liberal use of alcoholic beverages lowers efficiency and menaces longevity.

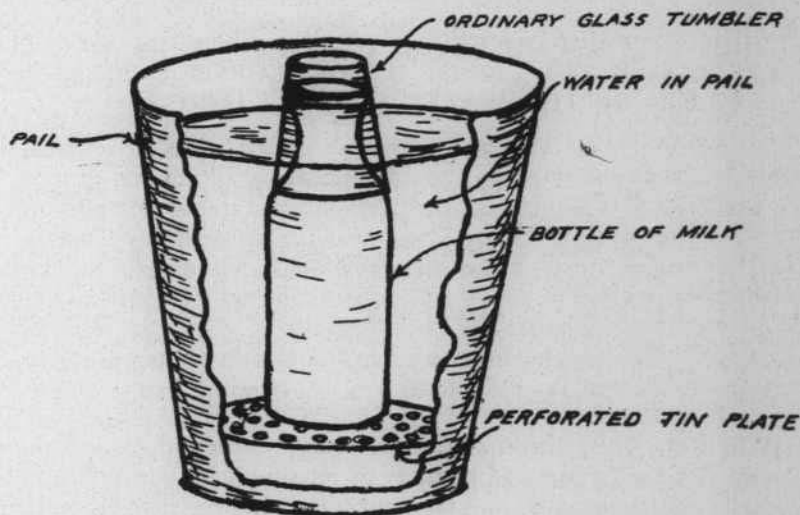
A book on "Exercise and Health" may be had free for the asking from the U. S. Public Health Service.

Sanitary Engineering Notes

HOUSEHOLD PASTEURIZATION OF MILK

By GEORGE W. SIMONS, JR., Chief, Bureau of Engineering.

It is often desirable to pasteurize the milk to be used in the home, especially that intended for children, and when the milk comes from cows not known to be free from tuberculosis. The process can be easily carried out in milk bottles or fruit jars. These should be closed in some way in order to prevent the formation of the "skin" that forms on milk heated in an open vessel. This membrane has a protective influence on the bacteria embedded in it. The bottles are placed in a vessel having a false bottom to avoid breaking them. The vessel is filled with water to the height of the milk in the bottles. The water is heated to 150 degrees F. and kept at this temperature for twenty minutes. The bottles of milk are then removed and cooled at once.



In the pasteurizing process the bacteria that do not form spores are killed, but the spores are not destroyed. If the heated milk is not cooled rapidly and kept cold, these spores will germinate and by their rapid growth the milk will soon be rendered unfit for use. Only small quantities of milk should be treated at one time, no more than can be used in twenty-four hours.

In efficient pasteurization at least 99 per cent of the bacteria should be killed. The better the quality of the raw milk, the better will be the pasteurized milk. It is not a process by which poor milk that has abnormal odors or tastes can be made unobjectionable.

STERILIZATION OF WATER

By GEORGE W. SIMONS, JR., Chief, Bureau of Engineering.

The sterilization of contaminated waters for the preservation and restoration of purity is today a very common procedure. The destruction of the harmful bacteria is certain and prevailing practice, if properly attended to, is reliable and safe. In consideration of the present available methods for sterilization there is no reason why all waters consumed cannot be of a quality beyond any doubt or suspicion.

The two common agents used for sterilization are, (a) Hypochlorite of lime, commonly termed "bleach," (b) and liquid chlorine. In each the active destructive element is the same, namely the nascent or free oxygen, which upon liberation oxidizes or burns up the bacteria.

The hypochlorite of lime or "bleach" has been used for some ten or twelve years and during this period its value has been demonstrated in many instances—formerly it was the sole reliable means. The following table shows the effect of hypochlorite sterilization in a number of cities over various periods of time.

DECLINE IN TYPHOID FEVER DEATH RATE IN SIX CITIES
FOLLOWING THE USE OF HYPOCHLORITE STERILIZATION
OF THE WATER SUPPLY. (After Alvord)

	Began Using Hypo.	Before Using		After Using		Reduction in Death Rates
		Period	Death Rate	Period	Death Rate	
Baltimore ..	June 1911	1900-10	35.2	1912-13	22.8	35%
Cleveland ..	Sept. 1911	1900-10	35.5	1912-13	10.0	72%
Des Moines	Dec. 1910	1905-10	22.7	1911-13	13.4	41%
Erie	Mar. 1911	1900-10	38.7	1912-13	13.5	65%
Evanston ..	Dec. 1911	1907-10	26.0	1912-13	14.5	44%
Omaha	May 1910	1900-09	22.5	1911-13	11.8	47%

Within the past three years, however, elemental liquid chlorine has come into wide use and because of its simplicity of application, its extremely effective work and economy, is being extensively employed for cities and towns over the entire country, and for permanent treatment plants liquid chlorine apparatus should be employed. Advice will be readily given concerning liquid chlorine apparatus upon application to the Bureau of Engineering. In a great many instances though, the application of liquid chlorine is not advisable or feasible because of the small quantity of contaminated water to be treated. In such cases the "bleach" solution method which is described in the following paragraphs should be resorted to. Hypochlorite of lime which is commercially known as "chloride of lime" or "bleaching powder" is a compound of calcium chloride, calcium hypochlorite, lime, impurities and water. The chemical can be secured in canisters in quantities from 1 pound to 500 pounds at prices varying from 9-13

cents per pound—but for average water consumptions should be purchased in small quantities, as exposure to air causes a decided loss of strength. The material as purchased is known as 33-35-37 per cent bleach—the arbitrary “available chlorine” being the standard by which it goes. In most instances the fresh, properly sealed cans supplied on the market will average practically 35 per cent “available chlorine” or popularly termed “35 per cent bleach.” It is absolutely necessary to get fresh “bleach” and note the percentage “available chlorine” generally listed on the label of the can. If the substance has caked and absorbed moisture it should not be used as its destructive power has been greatly reduced.

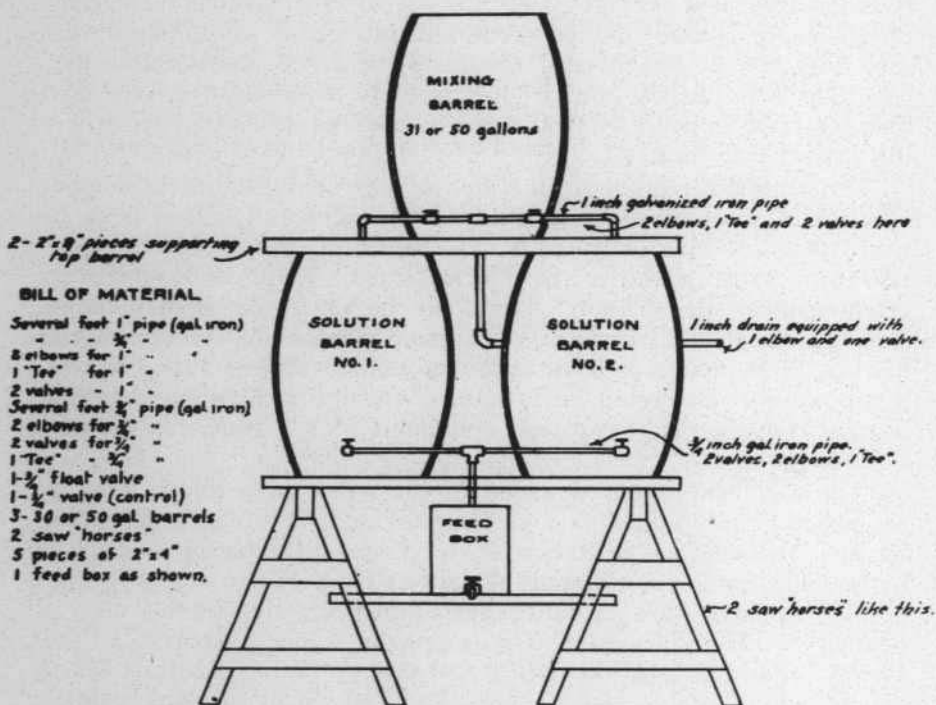
The general condition of the water to be treated governs the amount of chemical necessary for sterilization to an extent, and it is to be urged that a sample of water be sent to our laboratory for examination if any great quantities are to be sterilized. Water to be effectively acted upon by the “bleach” should not be too highly contaminated, should be clear and of a uniform organic composition. Hypochlorite has a selective action on bacteria and is less effective on turbid waters, which should be filtered, and those possessing a high or abnormal organic content. If the organic content is high a taste may be perceptible.

The sterilizing agent is added to the water as a dilute solution, the amount to be added to a given water and its strength depending largely on conditions as stated above. Usually the bleach solution is highly effective in such minute amount as 0.5 part per million. That is, one half part bleach per million parts water, or stated another way, 12 pounds of bleach per 1,000,000 gallons of water consumed. Prof. Phelps has found from experience that doses of 6-10 pounds of bleach per million gallons of water sufficient to destroy all harmful bacteria. *Generally it can be stated that one ounce of powder will sterilize 5,000 gallons of water*, an amount so trifling that no taste of lime chloride can be perceived.

For the treatment of small supplies the plant pictured on the accompanying page is devised. It consists of three barrels, four or five 2x4 inch boards to support the barrels, two saw horses, a feed box equipped with a float and control valve. The barrels are the ordinary commercial 31 or 50 gallon type used for vinegar, beer, or kerosene, a kerosene barrel thoroughly burned out being suitable. The feed box is the only intricate part of the apparatus. The float valve can be secured from a reliable plumber, being of the same type as that used in a water closet flush tank. The control valve is an ordinary faucet procurable at a local hardware store and the pipe of the various lengths can also be secured here.

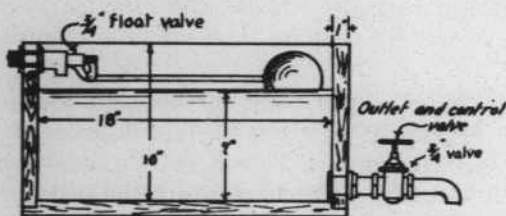
In preparing the bleach extreme care should be exercised. The mixing is done in the mixing barrel where a good flowing paste is made by using at least *one-half gallon of water per pound of bleach*

STATE BOARD OF HEALTH OF FLORIDA



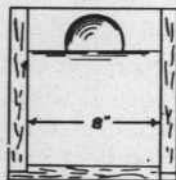
BILL OF MATERIAL

- Several feet 1" pipe (gal iron)
- 2 elbows for 1" - "
- 1 "Tee" for 1" - "
- 2 valves - 1" - "
- Several feet 3/4" pipe (gal iron)
- 2 elbows for 3/4" - "
- 2 valves for 3/4" - "
- 1 "Tee" - 3/4" - "
- 1-3/4" float valve
- 1-1/2" valve (control)
- 3- 30 or 50 gal barrels
- 2 saw "horses"
- 5 pieces of 2"x4"
- 1 feed box as shown.



SOLUTION FEED BOX.

Box is constructed of 1 inch cypress, interior painted with acid proof paint. Float valve of ordinary type used in water closet. Outlet valve is ordinary 3/4 inch brass type. 3/4" float valve costs about \$1.75.



END VIEW

Outlet valve to be set and arranged so that proper amount of solution will be fed into supply.

EMERGENCY HYPOCHLORITE PLANT

BUREAU OF ENGINEERING
GEO. W. SIMONS, JR., CHIEF.

powder. This mixture should be constantly stirred, 15-30 minutes to form a paste, the proper amount of diluting water added and then allowed to settle for at least one hour before using. The paste or sludge then remaining in the bottom of the mixture barrel should be drained out, as it contains very little effective agent. The solution, or supernatant liquid is then allowed to flow into one of the solution barrels. This latter solution, in one of the barrels, should never be stirred while using. It is advisable to make up the bleach solution of a weak strength, 1 or 2 per cent that is 1 lb. or 2 lbs. per 100 lbs. of water. In order to explain the mixing application of the solution to the supply at hand the following concrete example will be quoted so that one can follow it. Assuming a water consumption or pumpage per day of 1,000,000 gallons, and a 2 per cent solution to be used, i. e. 2 pounds of bleach per 12 gallons of water, or one pound per 6 gallons of water, the bleach having 30 per cent "available chlorine" per pound, to be applied at a rate of 0.4 part per million "available chlorine" per million parts of water. Then $8.3 \times 0.4 / 0.30 = 11.1$ pounds (11 lbs. 2 oz.) of bleach should be used per million gallons of water consumed. $11.1 \times 6 = 66.6$ gallons (6 gallons, $2\frac{3}{4}$ quarts) of 2 per cent solution per each million gallons of water. That is 66 gallons of water should be added to the 11 lbs. of "bleach" powder for every 1,000,000 gallons consumed.

In case the bleach is to be added at any other rate than that stated, simply substitute 0.3, 0.2 or 0.5 instead of 0.4 in the above equation and re-estimate. If the bleach is of a different percentage substitute that percentage instead of 0.30 as shown above and rework. This dilute prepared solution is to be added through the feed box under a constant head. The float valve shown retains a constant head of water on the faucet, that is, keeps the water level in the box always the same insuring the same amount of water to always flow through a given size opening in the faucet. The question now arises, to proportion the quantity of solution for less than a million gallons. This amount to be added is directly proportional, that is, if the daily consumption is only 100,000 then the solution is $100,000 / 1,000,000$ or $1/10$ as much, or 6.66 gallons, (6 gallons $2\frac{3}{4}$ quarts) of solution per 100,000 gallons of water. This amount will have to be regulated largely by experiment. If the supply is entirely pumped in a few hours, then allowed to rest the proportion must be regulated accordingly. For instance, suppose 1,000,000 gallons is pumped in 10 hours then we have 100,000 gallons per hour or 0.66 ($2\frac{3}{4}$ qts.) gallons of bleach to be added per hour. In order to regulate the correct quantity of solution flowing it would be well to take a quart liquid measure and note the time necessary to fill it with faucet partially open. 0.66 gallons of bleach per hour is $2\frac{3}{4}$ quarts per hour or about $1\frac{1}{2}$ quarts per half hour. Thus the faucet can be so regulated that $1\frac{1}{2}$ quarts would flow by in one-half hour.

The solution can be added in the suction main of the pump by drilling a small $\frac{1}{4}$ -inch or $\frac{5}{8}$ -inch hole and placing a funnel in it, directly under the control valve.

A great many times a camp party or householder might want to sterilize a small amount of water—water for his daily use. The quantity is too small for such an apparatus as described above but the same effective work can be produced in the following manner: Take one-half pound of chloride of lime and mix it thoroughly with a gallon of water—shaking the bottle well to insure a good mix—allow this solution to rest for a few hours (2 or 3) in order to give the sludge a chance to settle. Two or three drops of the clear solution will effectively sterilize a gallon of water—stirring the water well will insure complete action. In case the water tastes, the number of drops should be diminished.

If any doubt or uncertainty exists in the mind of the reader get into immediate touch with the Bureau of Engineering and seek its advice. The above instructions have been made as clear as possible without being on the ground, so do not hesitate to notify the Bureau in the event of a misunderstanding.

During the week of October 9th sanitary engineering investigations were conducted at Chipley, Marianna, Perry and Hampton Springs into water supply, sewerage and sewage disposal. During the week of October 16th similar investigations were conducted at Fort Meade, Wauchula, Arcadia, Punta Gorda, Kissimmee and St. Cloud. A report will be made upon each investigation, making such recommendations and giving such advice as is deemed necessary. Twenty-two cities have been investigated during the past four months.

STATE PLUMBING CODE

Considerable interest is being manifested throughout the state in a plumbing code. The Bureau of Engineering has received several encouraging letters in support of such a movement. One prominent plumber of Jacksonville writes as follows:

"I have been an advocate of this move for a number of years, being a plumber and doing business in Jacksonville for the past thirteen years, still being identified with the plumbing business."

Correspondence

HEALTH ORDINANCES FOR SMALL TOWNS

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Florida.

Dear Doctor: As City Health Officer, I have been requested to draft a health ordinance. With deference to your knowledge of the needs of a town of this size, and your experience as to the possibility of such an ordinance that can be enforced, I am writing you to ask that you give me some suggestions, or better still, if you have or can secure a copy of such an ordinance. This town, as you may know has no sewerage or water works, except those of private individuals supplying from one to a dozen families. We have practically no health or sanitation laws, and such as we do have we wish to have the present ordinance supersede. You will see, by this, that it is a matter of a complete system of laws, covering the whole matter in one ordinance that we desire.

I will appreciate anything you may do to help me in this matter, as I am more capable of enforcing a law of this kind, than of making one.

Thanking you, I am,

Fraternally,

Jacksonville, Fla., Oct. 5th, 1916.

My Dear Doctor: I have your letter of the 30th, on my desk, in fact, it has been before me for several days, and I have been considering just exactly what to say to you, because you have put up a very knotty problem to me to answer.

An ordinance drawn with any degree of applicability to the different towns of the State is practically impossible, for the reason that conditions exist in regard to health management, supervision or maintenance in one place that are not called for in another.

I would suggest to you, first that you should have a Board of Health. For a town the size of yours I think three would be a sufficient number. This Board of Health should appoint, with the approval of the city council, a health officer at a salary commensurate with his duties. I am very much in favor of whole time man for public health work, but I realize that in small communities, it would be impossible to pay physicians for their entire time, with anything like an amount that would enable him to live comfortably, for the finances of the community would scarcely warrant it. At least, they would think so. My belief is that the care of the public health is as important as the protection against fire or to preserve good order through the police. It is not possible to have city councilmen, though, think the same way, so we will have to make the best of conditions as we find them and provide for a health officer to be paid a decent salary for the services that he is to render.

Provision for a Board of Health and a health officer would have to be made by ordinance in order to make it effective and legal, then an ordinance providing for the preservation and protection of the public health should be drawn by the attorney of the municipality to embrace the subject of disposal of sewage, screening of surface closets, where there are no sewers available to carry off the domestic wastes, pure water, pure milk vendied in the municipality, reports of communicable diseases to the city health officer, and a general compliance with the rules and regulations of the State Board of Health, and statutes of the State with reference to municipal sanitation.

I am sending you under another cover, a copy of the rules and regulations of the State Board of Health, from which your attorney can draft an ordinance suitable to a town the size of yours, giving it ample protection against disease, and providing for the maintenance of the conditions that will promote good health.

Now this is about all that I can say at this time. I have contemplated, for some time, drafting an ordinance which might be a model for small towns, but the difficulty, as stated, in the beginning of this letter, is that no two towns have the same problems to contend with.

If you will be a little more specific and state exactly what you want me to advise you on, I shall be glad to give you any assistance in my power, or send you any literature that may be in the offices of the Board.

In passing, let me say that the Public Health Reports of the U. S. Public Health Service, which can be had for the asking of the Surgeon General of the Public Health Service at Washington, contain almost weekly copies of ordinances of different towns in the United States, and it may just be possible that you may find something in these that will be suitable for your purpose. Ask the Surgeon-General for a complete file of the Public Health Reports for the year 1915 and I am quite sure they will contain a good deal that will be of interest to you in your present exigency.

Very truly yours,
(Signed) Joseph Y. Porter, State Health Officer.

ENFORCEMENT OF SANITARY LAWS

Dr. J. Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: We are trying to enforce the sanitary law in this place, and want to know if you can give us any assistance. Can you supply us with copies of the State law on the fly-proofing of surface closets? Also the specifications as to the same? If we have something to show to the people in regard to the State law on the subject, I think we will be able to enforce the law.

Any assistance you can render us along this line, will be greatly appreciated. Thanking you in advance for any help you can render us in our efforts, I remain,

Yours very truly,

My Dear Sir: In response to your letter of July 2nd, I am mailing you, today, under separate cover, a number of copies of the State law governing the construction of surface privies, and rules of the screening of foods and am also sending you therewith a copy of the August 1915 Health Notes, on page 244 of which you will find the minimum requirements of the State Board of Health concerning privy construction in conformity with the provisions of the law governing this matter.

Assuring you of any assistance, which I may render you in this or other matters pertaining to public health, I am,

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

NEED FOR HEALTH COOPERATION

Dr. Joseph Y. Porter, Jacksonville, Florida.

Dear Doctor: Enforcement of Privy Screening Law. I have had several arrests to make and fines to impose in carrying out provisions of the act, and there is a point upon which I would be glad to have light. Some of the people who were notified that they would be compelled to screen their privies have simply torn them down and taken to the bushes.

Now will the law uphold me in compelling these people to provide themselves with suitable privies coming within the provisions of the law?

Very truly yours,

My Dear Doctor: Thanking you for your letter of the 22nd inst, allow me to express my gratification at your action in enforcing the "Screening Law" against insects, in your city.

Replying to your inquiry in the concluding paragraph of your letter, asking whether the law would uphold you in compelling people to provide suitable privy dwellings, where they have destroyed the unscreened buildings, I doubt if you, as mayor, could of your own initiative compel people to construct privy buildings, but your City Council Ordinance could do so, and having your approval your marshal could enforce the City Ordinance.

Thanking you for writing me, I am,

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

STERILE CONTAINERS FOR WATER COLLECTION

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: Am sending water from a well, which water is used by a typhoid suspect. Please analyze and let me know condition of same.

Yours truly,

Jacksonville, Fla.

Dear Doctor: I have your letter of July 2nd, with regard to the examination of the specimen of water, which has also been received. It is impossible for us to attempt to make an examination of the water, in its present form, as such an examination would not give us any satisfactory results, upon which an opinion could be based. I am sending you, to-day, a sterile bottle, in which a sample of water should be collected and a shipping case, in which it may be iced and expressed to our laboratory. It is essential that samples of this kind be collected with the utmost care, in order to prevent any possible contamination either from the container or from the hands of the person collecting the sample. Full directions, for the collection and shipment of this sample may be found upon the reverse side of the data blank, which accompanies the container.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

VALUE OF CITY HEALTH BOARD TO PEOPLE

(Gainesville Sun)

Editor Sun: We respectfully beg a little space to acquaint your readers and citizens of Gainesville with some of the work of the City Board of Health during the past six months.

We have held stated monthly meetings on the last Friday of each month, and special meetings to consider any matter worthy of attention, averaging one meeting a week during the summer, and sometimes two meetings per week for emergencies. The members of the Board have given their time freely and cheerfully to this work, but the suggestion has recently been made that we have been too modest in relating our accomplishments; hence this portion of our story.

In order that the Board of Health may accomplish the greatest good, we must have the co-operation of the people and the support and confidence of the City Council. Gainesville has the reputation for being one of the cleanest and most healthy towns in Florida, and it is highly desirable that we sustain this reputation and improve it. The Street Department of the city, which has charge of the streets and removal of rubbish, deserves great credit for its efficient work. The Board of Health desires to have its share of credit, and we beg to submit a few things which have been accomplished during the past year. We do not ask all the credit; the Council deserves equally as much; the ladies of the civic Clubs have given most earnest and helpful cooperation, and public opinion itself is the final referee.

The City incinerator is now in successful operation, disposing properly of rubbish and night soil of the city. The surface closets in the city limits have been screened, even before this precaution was required by the State law. The fruit stands are screened with wire. The meat markets and restaurants are screened and kept in clean and sanitary condition. The bakeries, soda fountains and cold drink stands of all kinds are regularly inspected and most of them are unsurpassed for cleanliness in the State of Florida. The Board has placed score cards in all places where food and drinks are kept which have attracted attention and produced a friendly rivalry among the owners of these establishments in securing the best score.

The Board secured the cooperation of the State Board of Health in testing practically all of the dairy cows supplying milk to the city of Gainesville, with tuberculin, and the results of the test showed 188 cows free from any suspicion of tuberculosis, a disease which is the scourge of many Northern dairies.

The Board has prepared a regulation requiring sanitary conditions in all barns and dairies supplying milk to the city and this has already brought about some wonderful improvements in the equipment and methods of part of the dairies. We found that a few of the best dairymen were already meeting the requirements for producing the highest class of sanitary milk. The recent reports of the State Laboratory on the bacteria content of milk from Gainesville shows one of the lowest counts, 5000 per cc, ever recorded in the State. It is a pleasure to the Board to help and endorse such dairymen.

Considerable attention has been given to the water supply of various wells supplying Gainesville; not only those owned by the city but by private companies. The supply from the city wells is unquestionably pure, and the ice factories are also using pure water in their work. The Board is still working upon the matter of securing a larger supply of water from the Boulware Springs, as this water contains less lime and its use would make our drinking more palatable and also save a large amount of soap and washing powders now used in hard water.

The Board has requested the Atlantic Coast Line to clean up and drain swampy conditions of its property south of the Seaboard depot, and the Seaboard Air Line to improve conditions along its right-of-way through the city. Any person who has not seen the work which has been done by

these railroads during the present summer, should make a visit to these points, and this would very quickly decide the question whether requests from the Board of Health have any influence. The T. & J. Railway has long ago responded to requests for improving the drainage condition along its right-of-way.

At the suggestion of a number of interested citizens, the Board has recommended that the Council take some steps toward compulsory screening of certain buildings and residences in the city, or a rule that screens must be included in building permits in the future above \$1,000 value. We believe this would be a very helpful rule, but we must await public sentiment in the matter before proceeding further.

The Board feels it has had effective service from its officers during the past two years, the City Health Officer and the Sanitary Inspector. No serious epidemic has occurred in Gainesville since the Board began its work. This may be due partly to good luck and the healthy condition of our community, but the Board believes that many epidemics would have been possible without the care and watchfulness of our officers and the cooperation of all the physicians of the city.

We hope to be able to continue the present officers without reduction of salaries. Council has suggested a reduction from \$300 to \$50 for incidental expenses of the Board next year. We are willing to try the work on this amount, but if any serious epidemic unfortunately gains headway in our community, it would be absolutely necessary for the Council to provide additional funds, or let our people die. The Board has been hoping to make some arrangement for charity treatment and care of the indigent sick. Our sister city of St. Augustine has a public health nurse for this purpose, working under the direction of the City Health Officer.

The officers have made very few arrests for violations of the rules of the Board of Health, as we believe in settling these matters out of court if possible. The Board has been very anxious to keep down flies and mosquitos. We know that malaria is communicated solely by the mosquito and that flies communicate many forms of intestinal diseases. With the coming in our midst this fall of a larger body than ever of students at the University of Florida, it is our privilege and duty to keep the town so clean that no malaria or typhoid cases will occur among any of these young people. Nothing would give Gainesville and the State University a more serious blow than an epidemic of this sort among the students. It behooves all our citizens to keep their premises in such clean and sanitary condition that flies and mosquitoes have little opportunity to breed in the city limits. The Board has been very much troubled over the question of the weeds on many unused city streets and on vacant lots belonging to different companies and individuals. Many letters and personal appeals have been used on this subject. It is difficult to reach such nuisances by rules and laws, yet we all know that they are unsightly and invariably dangerous breeding grounds for insects. Civic pride should stir our citizens to clear up all vacant premises having large crops of weeds, and assist the street department in doing the same with the city property.

In all public work of this sort we are each and every one inclined to request our neighbor to clean up before we begin work upon our own premises. How much better it would be if the majority would first clean the rubbish from their own premises and then ask the neighbor to do likewise.

The Board wishes to state that its officers, so far as we know, have answered every call made upon them during the past two years, in investigating and controlling communicable diseases and sanitary nuisances. We ask the public for co-operation and desire to continue to serve them. Give us a little encouragement occasionally, if you find it in your heart to do so, and at the very least do not tell your neighbor that the Board of Health has done nothing for Gainesville until you have investigated our records thoroughly. We are ready for any reasonable suggestion at all times and hope that next year our citizens will show us that they are interested in the health of the city as much as in other public and private enterprises.

Very respectfully, CITY BOARD OF HEALTH,
By C. L. Willoughby.

Veterinary Notes

THE INTERTRANSMISSIBILITY OF TUBERCULOSIS

By Dr. Chas F. Dawson, Veterinarian State Board of Health

(Continued from September Health Notes)

Already a large amount of work has been done which shows that tuberculosis is an intercommunicable disease. It is admitted that the human bacillus is less virulent for the animals than is the bovine bacillus. This was shown by Sidney Martin as far back as 1895, and has since been demonstrated by others. While these observations are of scientific value, they can be explained in the light of our knowledge today. We now know that the virulence and morphology of a particular type can be changed at will.

Nocard, in 1898, transformed human bacilli which ordinarily were non-pathogenic for fowls into a pathogenic avian type by successive cultivations in collodion sacs in the peritoneal cavity of fowls.

Delépine found great variation in the virulence of human bacilli, and by using a mixture of human sputa, easily produced tuberculosis in a calf, cultures from which showed a great increase of virulence over the original bacilli.

Römer passed an old laboratory culture of human bacilli through a goat, which animal is somewhat resistant to tuberculosis, and found that the bacilli were exalted in virulence for cattle and sheep. Not only was the virulence increased, but there were morphological changes toward the bovine type, and it grew less luxuriantly on artificial media. He also transformed the avian type into the mammalian type by passage through guinea pigs and rabbits, to the extent that the lesions produced were similar to those produced by the mammalian type. He also revived the artificial cultural capacity of different types by passages through white mice.

Moeller found that a single passage of the human type through a guinea pig exalted it in virulence for guinea pigs.

Dinwiddie was able to transform the bovine type to the porcine type by passage through swine. These changed characters persisted in subsequent cultures and inoculations.

Wiener isolated a human type from a horse which was virulent for fowls. Collodion-sac cultivations in the bodies of fowls changed the type from human to avian.

Karlinski found that the virulence of human bacilli can be increased by passages through guinea pigs or cattle to a point where they produce generalized tuberculosis in cattle, and where they do not differ materially from the bovine types.

Mohler and Washburn, by the rapid passage of sputum bacilli through a series of five cats, report a great increase in their virulence for young cattle.

Dieudonne, by the repeated passage of mammalian bacilli through frogs, observed a gradual increase of virulence for cold-blooded animals and an approach to the type found in fishes and frogs.

Arloing found that human bacilli vary in virulence from one extreme, where they readily produce generalized tuberculosis in guinea pigs and rabbits, to the other extreme, where they are harmless to rabbits and but slightly affect guinea pigs. The virulence of the weak variety could be exalted so as to readily affect guinea pigs and rabbits by passage through two or three guinea pigs.

It will be seen from the foregoing that tuberculosis affects a wide range of species of animals, and that bacillus undergoes very important changes according to environment. The bovine type is pathogenic for horses, cattle, sheep, swine, dogs, cats, guinea pigs, and rabbits, a range of pathogenic power that is not possessed by any other microorganism that is not also pathogenic for man.

From the nature of things we cannot, by experimental data, such as the foregoing, prove the communicability of animal tuberculosis to man, but sufficient evidence is at hand to convince us that man does contract tuberculosis by contact with and by the use of the edible portions of tuberculous cattle.

Salmon, in Bulletin No. 33, Bureau of Animal Industry, cites the following cases which show clearly the danger from this source confronting the human race: Three cases of skin tuberculosis due to accidental inoculation with the bovine bacillus. Veterinarian Moses wounded his thumb while making an autopsy on a tuberculous cow. The wound healed, but at the end of six months a cutaneous tubercle had formed, and the patient died of phthisis, in eighteen months. A man engaged in cleaning a cattle car was wounded upon the back of the hand by a piece of the broken woodwork of the car. Tuberculosis developed at the wound surface and was treated by a physician. The patient's health declined and he died of generalized tuberculosis within a year.

A physician was called to treat a six-year-old girl for supposed ivy poisoning. Fresh cream had been applied to the affected parts at home. Tuberculous ulcers developed where the cream had been used topically. Two rabbits, inoculated with some milk from the same cow, developed tuberculosis. Likewise, a rabbit inoculated intraperitoneally with caseous material from the girl's leg developed fatal tuberculosis.

A similar case was where a girl, who had a wound on the finger, became infected by milking a tuberculous cow. Within six months more than sixty subcutaneous abscesses developed in various parts of the body. The nature of these lesions was determined by the inoculation of a rabbit.

A sailor tried to remove tattoos from his arm by pricking milk into the marks with a needle. Lupus developed, and the man made a recovery after surgical measures were taken.

These cases show as plainly as an experiment well could that bovine tuberculosis can be communicated to man in a fatal form by subcutaneous inoculation.

That bovine tuberculosis is communicated to man by the ingestion of the products of tuberculous cattle is just as plainly shown by the following cases, also cited by Salmon:

Twelve girls, at a boarding school, contracted tuberculosis, and five of them died of the intestinal form of the disease. An examination of the cow which furnished the school with milk revealed extensive tuberculosis of the intestines and udder.

The daughter of a physician was accustomed to visit her father's farm on Sundays—and while there, to drink freely of milk. She became ill and died in ten months. A post-mortem examination revealed tuberculosis of the abdominal viscera and mesenteric glands. On examination of the herd, four of the five cows comprising it were found tuberculous, two having disease of the udder.

A child twenty months old died from abdominal tuberculosis three months after having visited its uncle's farm, where it was fed milk from the family cow. The child's sickness began a few weeks after its return home. It had previously been in perfect health, as were also its parents. When the cow was examined, she was found to have generalized tuberculosis.

Two young daughters of a healthy family were raised on milk from a tuberculous herd, and both contracted tuberculosis, while two older brothers, who used little or no milk, remained well.

A previously healthy man was treated for six weeks for supposed typhoid fever. As the expected convalescence did not occur, a consultation was had, and a diagnosis of acute miliary tuberculosis was made. Shortly after, the man's one-year-old child came down with meningitis of supposed tubercular origin, no post-mortem being permitted. Both parent and child had drunk largely of milk from a cow which a subsequent test and examination showed had extensive tuberculosis of the lungs, peritoneum, and udder.

These cases could be extended in number, but are sufficient to show, beyond a reasonable doubt, that the disease can be communicated from cattle to man through the use of the products of tuberculous cattle and by subcutaneous inoculation.

(Concluded)

From a paper read before the Sixth International Congress on Tuberculosis, Washington, 1908.

VETERINARY INSPECTORS APPOINTED

The State Health Officer has commissioned the following Veterinary Inspectors of the Bureau of Animal Industry, as Veterinary Inspectors of the State Board of Health: Dr. E. M. Nighbert, Inspector in Charge; Dr. H. A. Smith; Dr. A. C. Stever; Dr. Harry F. Kern.

The duties of these inspectors is to co-operate with the citizens, county and state governments in tick eradication work. Their salaries and traveling expenses are paid by the Federal Government. The headquarters of this force, which is under the direction of Dr. E. M. Nighbert, is 1208-9 Heard Building, Jacksonville, to whom inquiries should be addressed.



Summary of Public Health Administration, September

WEST COAST DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Supervision of inspections by sanitary partolman.

Sarasota: Sanitary inspection of town; health conditions investigated; open closets and stores inspected.

Safety Harbor: Inspection trip to Safety Harbor upon request of State Health Officer; conference with three members of sanitary committee.

Clearwater: Sanitary inspection of town; stores and eating places inspected; health condition investigated.

Dunedin: Sanitary inspection of town; restaurants and stores inspected.

Bradentown: Sanitary inspection of town; health conditions investigated; stores inspected for state screen law, and copies of law sent to those not complying.

Manatee: Sanitary inspection of town; investigation of health conditions; all stores inspected for screen law.

Palmetto: Sanitary inspection of town; health conditions investigated and stores inspected.

Ellenton: Sanitary inspection; stores inspected for State Screen law; health conditions investigated; school inspected.

Riverview: Sanitary inspection and investigation of health conditions; inspection of rural school, and matter of sanitation taken up with trustees.

Parrish: Sanitary inspection of school; matter of sanitation taken up with trustees.

Tarpon Springs: Visit to Tarpon Springs upon request of local health officer; investigation of trachoma cases among school children; diagnosis of trachoma made; talk to school children on fly infection; suggestions given regarding trachoma and advice as to necessary precautions; attendance at meeting of authorities and school partons at request of health officer; talk given regarding trachoma.

Valrico: Sanitary inspection of rural school; matter of sanitation taken up with school trustees.

Brandon: Sanitary inspection of town; rural school inspected, and matter of sanitation taken up with school trustees.

Gillette: Sanitary inspection of school.

Oak Park: Sanitary inspection of school; matter of sanitation taken up with school trustees.

Dover: Investigation of complaint at request of State Health Officer; recommendations made.

Mango: Sanitary inspection of school; matter of sanitation taken up with school trustees.

Ballast Point: Visit to case of suspected infantile paralysis at request of attending physician.

WESTERN DISTRICT

Pensacola: Routine work office of Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections of trains. Supervision of inspections by sanitary patrolman as follows: Screening Law—boarding houses 2, restaurants 4, lunch counters 1, meat shops 1, grocery stores 3, fruit stands 3; Surface Closet Law—private residences 3; Sanitary Nuisance Laws—horse stable 1; Communicable Diseases—typhoid fever 9, tuberculosis 2, fumigations, releases, etc., 5.

SOUTH EAST COAST DISTRICT

Key West: Routine work, office of Assistant to the State Health Officer. Routine laboratory work. Matter of city dumping grounds taken up with city council.

Miami: Consultation with State Health Officer.

Ft. Lauderdale: Sanitary inspection of city.
 West Palm Beach: Sanitary inspection of city.
 Ft. Pierce: Sanitary inspection of city.
 Coconut Grove: Visit to suspected case of infantile paralysis; conference with physicians regarding case.

CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer.
 Jacksonville: Inspection of children under 16 years of age for infantile paralysis on incoming trains from without the State.
 Mayport: Investigation of reported case of infantile paralysis.
 Reddick: Inspection of ice and cold storage plant.
 Wildwood: Investigation of outbreak of typhoid fever. Sanitary survey of town, and conference with members of council in regard to matters of sanitation.
 Sanford: Investigation of a reported death of child from infantile paralysis; diagnosis doubtful.
 Santa Fe: Inspection of a nuisance in shape of unclean lot for feeding horses; abatement effected.
 Melrose: Inspection of a nuisance in shape of unclean pig pen; instructions given to keep same clean.
 Leesburg: Sanitary inspection of town.
 Eustis: Sanitary inspection of town.
 Alachua: Sanitary inspection of town.
 Gainesville: Sanitary inspection of town.
 Waldo: Sanitary inspection of town.

SOUTH CENTRAL DISTRICT

(District Assistant to the State Health Officer detailed on special work outside of district).

NORTH CENTRAL DISTRICT

(District Assistant to the State Health Officer detailed on special work outside of district).

NORTH EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer.
 Bunnell: Investigation unknown skin disease; diagnosis of Impetigo Contagiosa made.
 Jensen: Investigation of alleged case of infantile paralysis; diagnosis not confirmed.
 Ft. Pierce: Investigation of sanitary conditions.
 Melbourne, Eau Gallie, Cocoa, Titusville, Bayview, Hawks Park, New Smyrna, Lake Helen, Orange City, DeLand, Daytona, Port Orange, Daytona Beach, Seabreeze, Holly Hill, Ormond, Palatka, San Mateo, Crescent City, Pomona, Welaka, Palatka Heights, Interlachen, Federal Point, Hastings: Monthly trip of inspection over district; conferences with town officials; sanitary inspections made where necessary; advice given regarding town ordinances regulating surface privies; inspections or investigations of all sanitary matters reported in district during month.
 Jacksonville: Consultation with State Health Officer.

WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer. Screening notices served on 9 fruit dealers. Hookworm treatment given to 4 patients. Anti-typhoid vaccination given to 3 patients. Dog's head sent to laboratory for examination. Two sanitary nuisances ordered abated. Inspection of stores in regard to Screening law.

Centerville: Investigation reported typhoid fever; no cases found; Widal reaction negative.

Havana: Sanitary inspection of town.

Quincy: Sanitary inspection of town.

Chattahoochee: Sanitary inspection of Florida Hospital for the Insane.

Monticello: Sanitary inspection of town.

Lloyds: Sanitary inspection of town.

Arran: Investigation of typhoid fever outbreak; full directions given for control; anti-typhoid vaccine furnished for eight patents.

Marianna: Investigation of reported eruptive disease; none found. Sanitary inspection of high school building; matter of sanitation taken up with school authorities. Sanitary inspection of reform school.

INSPECTION OF CHILDREN ACCOUNT POLIOMYELITIS

Jacksonville: Inspection of children on inbound trains from North, and under observation at destination: 2 Assistants to the State Health Officer, 2 District Public Health Nurses.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during September: none. Total number towns visited in 1916 to October 1..... 121

PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes," Vol. XI, No. 9, September, 1916, pp. 28. Press Service Bulletins to Florida newspapers: Sept. 6, "Opening the Schools"; Sept. 13, "Years and Age"; Sept. 20, "Some Dry Facts"; Sept. 27, "Clean Up Week."

Publications out in September: none.

DISTRIBUTION OF LITERATURE DURING SEPTEMBER

Mailed upon request and distributed in field.....	4,916
Press Service Bulletins to Florida newspapers (4 issues).....	1,100
Health Notes, September, mailing list.....	10,650

Total number pieces distributed.....	16,666
Number pieces literature distributed Jan. 1 to Oct. 1, 1916.....	151,838

SMALLPOX

Reported cases of smallpox in Florida, September, 1916.....none
 Total number cases reported in 1916 to October 1.....87

DISTRICT TUBERCULOSIS NURSE INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, Month Ended September 30, 1916

<i>Residence of Cases Visited to Date by Districts</i>	<i>Total Number of Cases Under Instruction Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Cases in District Under Instruction to Date</i>	<i>Total Number of Cases Following Instruction</i>
District No. 1.....	85	3	7	..	..	81	42
District No. 2.....	44	..	..	..	..	44	19
District No. 3.....	138	27	7	..	..	147	88
District No. 4.....	84	8	..	5	6	78	59
District No. 5.....	138	23	2	4	3	153	100
District No. 6.....	188	29	3	2	5	207	153
District No. 7.....	45	20	18	5	..	42	38
District No. 8.....	85	40	2	7	5	111	58
District No. 9.....	151	..	..	..	..	151	151
District No. 10.....	143	33	11	14	1	150	85
District No. 11.....	77	27	4	4	..	96	63
District No. 12.....	140	..	..	..	..	140	140
Colored cases visited by colored nurse	..	..	..	..	..	..	..
Tampa	54	8	2	2	1	57	57
West Tampa.....	2	..	..	..	..	2	2
Plant City	14	2	..	1	..	15	15
St. Petersburg.....	..	11	..	..	..	11	7
Clearwater .....	..	7	..	..	..	7	5
Total for State	1,388	238	63	48	23	1,492	1,082

BIOLOGICAL PRODUCTS

Distribution of Biological Products during September (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only.) Number of persons receiving treatment:

County and Town	Anti-Smallpox Vaccine	Anti-Rabic Vaccine	Anti-Typhoid Vaccine	Diphtheria Antitoxin Curative and Immunizing	Tetanus Antitoxin Immunizing
ALACHUA					
Gainesville	30	..	..	..	..
BRADFORD					
Starke .....	..	..	1	6	..
COLUMBIA					
Lake City .....	..	..	5	..	..
DADE					
Miami	50	..	..	..	..
DUVAL					
Jacksonville	151	1	13	15	3
ESCAMBIA					
Pensacola .....	..	..	..	..	1
GADSDEN					
Greensboro .....	..	..	..	5	..
HILLSBORO					
Tampa .....	..	..	..	1	..
LEON					
Tallahassee .....	..	1	8	2	..
MADISON					
Madison .....	..	..	..	6	..
MONROE					
Key West .....	..	..	..	..	3
PALM BEACH					
West Palm Beach.....	10	..	..	..	..
PINELLAS					
Tarpon Springs.....	..	..	..	1	..
POLK					
Bartow .....	..	..	..	6	..
ST. JOHNS					
St. Augustine	30	..	..	..	..
ST. LUCIE					
Sebastian	10	..	..	..	..
SANTA ROSA					
Milton .....	..	..	8	5	..
SEMINOLE					
Chuluota	20	..	..	..	..
Sanford	70	..	..	..	..
SUWANNEE					
Live Oak	60	..	..	..	..
VOLUSIA					
Daytona .....	..	..	15	..	..
New Smyrna	40	..	..	..	..
WALTON					
DeFuniak Springs .....	..	..	23	..	..
WASHINGTON					
Panama City .....	..	..	..	8	..
Total.....	471	2	73	55	7

Total number persons receiving anti-smallpox vaccine in 1916 to October 1.....4,827
 Total number persons receiving Pasteur treatment in 1916 to October 1..... 44
 Total number persons receiving anti-typhoid vaccine in 1916 to October 1..... 793
 Total number persons receiving antitoxin in 1916 to October 1..... 162
 Total number persons receiving tetanus antitoxin in 1916 to October 1..... 16

CRIPPLED CHILDREN

NAMES								Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment October 1, 1916
	In St. Lukes, 9-1-16	In Brewster (Col.), 9-1-16	Outside Treatment, 9-1-16	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment				
F. P.	1	..	..	..	..	..	..	1 Daily Dressings....	..	Tbc. Hip.....	1
H. M.	1	..	..	..	..	..	..	1 Daily Dressings....	..	Tbc. Ilium.....	1
R. W.	1	..	..	..	..	..	..	1 Massage and Gymnastics.....	..	Spastic Paralysis	1
A. F.	1	..	..	..	..	..	..	1 Daily Dressings....	Cured 9-7-16....	Periostitis .....	..
W. W.	..	1	..	..	..	..	..	1 .....	..	Polio. Paralysis.	1
O. D.	..	1	..	..	..	..	..	1 .....	..	Tbc. Spine.....	1
F. B.	..	1	..	..	..	..	..	1 .....	..	Ankylosis Knee.	1
A. P.	1	..	..	..	..	..	..	1 Daily Dressings....	..	Osteomyelitis....	1
H. R.	..	1	..	..	..	..	..	1	Cured 9-30-16....	Tbc. Hip.....	..
I. T.	1	..	..	..	..	..	..	1 Adhesive Dressing.	Cured 9-27-16....	Spastic Paralysis	..
I. P.	..	..	9-13	..	..	..	..	1 Bone Resection, Daily Dressings....	..	Osteomyelitis....	1
Total	6	..	4	..	1	..	..	11	3		8

BACTERIOLOGICAL LABORATORIES
SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Tallahassee	Total (Sept. 21 to 30)
Animal Parasites	225	126	22	4	9	..	386
Diphtheria	1,588	55	21	..	16	5	1,685
Gonorrhoea	61	51	62	..	12	2	188
Malaria	217	179	57	4	22	5	484
Pathological .....	..	4	..	..	19	..	23
Rabies	6	1	..	..	..	..	7
Tuberculosis	127	73	33	1	18	2	254
Typhoid	204	124	78	1	26	6	439
Water: Bacterial Ex.....	51	5	..	..	15	..	71
Wassermann	311	102	1	..	..	..	414
Miscellaneous	38	45	12	8	77	3	183
	2,828	765	286	18	214	23	4,134

Total number of specimens examined by the Laboratories of the State Board of Health of Florida, during September, 1916.....4,134

TOWN

TOWN	Diphtheria	Gonorrhoea	Etiavaantumal	Quarlan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Rabies	Ascaris	Trichiuris	Oxyuris	Wassermann	Tape worm
Alachua	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
Apalachicola	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Arcadia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Archer	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Avon Park	..	..	..	..	..	..	..	2	2	..	1	..	..	..	..
Baldwin	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Bartow	..	..	..	..	..	..	..	..	4	..	1	..	..	..	..
Bascom	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..
Bradentown	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Brewster	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Bloomingtondale	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..
Brooker	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..
Brooksville	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Bunnell	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Bushnell	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Bryceville	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Carrabelle	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Center Hill	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..
" Release Cult.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Century	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Chattahoochee	..	..	..	..	1	..	..	..	..	..	..	..	..	10	..
Chiefland	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..
Citra	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..
Clearwater	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Crystal River	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Daytona	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
DeFuniak Springs	..	..	..	..	2	2	..	1	..	..	..	..	..	..	..
Delray	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Dunnellon	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Fellsmere	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Florahome	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Fort Meade	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Fort Ogden	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Gainesville	2	..	..	..	1	..	2	..	2	..	..	..	..	..	..
Graceville	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Greensboro	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Hernando	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Hilliard	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Jacksonville	47	11	..	..	3	1	6	8	17	1	..	2	105	..	..
" Release Cult.	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Jacksonville	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
Jasper	1	..	..	..	1	1	..	..	1	..	..	..	..	..	..
Key West	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..
Lakeland	..	3	..	..	..	..	1	..	..	..	..	..	..	..	..
Lake Butler	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Laurel	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Leesburg	1	..	..	..	..	..	..	..	5	..	..	..	..	..	..
Live Oak	..	..	..	..	..	1	..	..	3	..	..	..	..	..	..
Loughridge	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lulu	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..
Maitland	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
Manatee	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
Melbourne	..	1	..	..	..	1	..	..	1	..	..	..	..	..	..
Miami	..	2	..	..	2	..	2	3	1	..	..	..	..	2	..
Micosukee	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Monticello	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..
Mt. Dora	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Mulberry	2	..	..	..	..	1	..	..	1	..	..	..	..	..	..
Ocala	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Okeechobee	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Oklawaha	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Orlando	..	..	..	..	1	..	1	1	2	..	..	..	1	..	..
Panama City	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pensacola	..	23	..	..	3	..	9	4	4	..	..	..	..	2	..
Perrine	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pompano	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Port St. Joe	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Putnam Hall	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Quincy	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..

(MALARIA)

TOWN	Diphtheria	Gonorrhea	Estivoautumnal	Quarlan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Rabies	Ascaris	Trichinosis	Oxyuris	Wassermann	Tapeworm
River Junction .....	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Romeo .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
St. Augustine .....	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..
St. Petersburg .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
San Antonio .....	..	..	..	..	..	..	1	3	..	..	..	..	..	..	..
Sanderson .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Sanford .....	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..
Sarasota .....	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Sebastian .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Sebring .....	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..
Sneads .....	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..
Starke	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Tallahassee	6	..	..	..	3	2	..	4	..	..	..	..	..	3	..
Titusville	21	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tampa	6	17	..	..	1	2	3	21	11	..	5	4	..	16	2
West Tampa .....	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Wauchula	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Watertown .....	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Welborn .....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Williston .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Zephyrhills .....	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Zolfo .....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Total.....	111	63	1	..	17	15	37	57	119	1	7	8	1	139	2

BUREAU OF VETERINARY SCIENCE

TICK ERADICATION

Cattle dipping vats reported constructed during September, 1916:

Clay County.....	1
Total number of vats reported constructed to October 1, 1916.....	120

GLANDERS

Diagnosed by Veterinarian during September, 1916:

Jacksonville, Duval County.....	1 horse, \$ 75.00
Hilliard, Nassau County.....	1 mule, 1 horse, 150.00
Total number of cases in 1916, to October 1.....	15

IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 228; mules, 289; cattle, 167; hogs, 45; dogs, 1.....730

EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 20; mules, 26; cattle, 2,023; hogs, 165.....2,234

INTRASTATE SHIPMENTS OF LIVE STOCK TO DADE COUNTY

Horses, 3; mules, 2; cattle, 10.....15

VETERINARY INSPECTIONS FOR THE MONTH OF SEPTEMBER

September 1, Florida City, inspection for ticks; September 1, Begbys Mill, supervising building tick-eradication pens; September 1, Tallahassee, inspection of hogs for shipment; September 2, Fort Pierce, inspection of horse for shipment; September 2, Brewton, (near Pensacola), vat construction; September 3, Kissimmee, dipping cattle for shipment; September 4, Pensacola, educational work in tick eradication; September 5-6, Brewton, vat construction; September 7, Gainesville, inspection and test of mules for shipment; September 8, Lemon City, inspection for ticks; September 7-8, Bonifay, investigate disease in hogs, (hog cholera); September 8-9, Merello, vat construction; September 8, Jacksonville, test for glanders, positive; September 12, Wardville, supervision of vat construction; September 12, Quincy, investigate cattle disease; September 13, Kissimmee, dipping 274 cattle for shipment; September 13, Tallahassee, serum treated and inspected hogs for shipment; September 13, Pensacola, educational work in tick eradication; September 14-22, construction of dipping vats in Escambia County; September 16-17, Arcadia, investigating deaths in cattle; September 16, Fort Pierce, inspection of mules for shipment to Dade County; September 16, Tallahassee, supervision of shipment of hogs; September 15, Florida City, inspection for ticks; September 17-18, Hilliard, test for glanders, two positive cases; September 18, Kissimmee, dipping 153 cattle for shipment; September 20, Ybor City, supervision of shipment of hogs; September 20, Wilmarth, dipping 105 cattle for shipment; September 22, Wilmarth, dipping 213 cattle for shipment; September 22, Wilmarth, dipping 28 cattle for shipment; September 23, Wilmarth, dipping 28 cattle for shipment; September 23-4, Arcadia, preparing dip and dipping cattle; September 23, Jacksonville, dipping cattle for Dade County; September 23, Wardville, educational work in Escambia County; September 25-30, construction of dipping vats in Escambia County; September 25, Kissimmee, dipping 716 cattle for shipment; September 25, Tampa, testing horses for shipment; September 26, Fort Pierce, inspection of horses and hogs for shipment into Dade County; September 29, Florida City, spraying cattle for ticks; September 30, inspection of cattle for shipment; September — Washington, D. C., to get Federal Tick Eradication Office established in Jacksonville.

P.H.R.
"Big bugs have little bugs, and lesser ones, to bite'em,
And little bugs have smaller ones, and so on, ad infinitum."
—Dr. John Reeve.



HEALTH NOTES

OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

STATE BOARD OF HEALTH

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Vol. XI

November, 1916

No. 11 (New Series)

HON. FRANK J. FEARNSIDE, President
Palatka, Fla.

HON. S. R. MALLORY KENNEDY, M. D.
Pensacola, Fla.

HON. C. G. MEMMINGER
Lakeland, Fla.

EDITED BY
JOSEPH Y. PORTER, M. D., Secretary and State Health Officer

EXECUTIVE OFFICE
State Board of Health Building, Springfield Boulevard
Jacksonville

BRANCH OFFICES

ASSISTANTS TO THE STATE HEALTH OFFICER

Tampa Key West St. Augustine
Pensacola Gainesville Ocala

AGENTS

Miami Fernandina Palatka

BACTERIOLOGICAL LABORATORIES

CENTRAL LABORATORY

Jacksonville

BRANCH LABORATORIES

Tampa Pensacola Miami
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

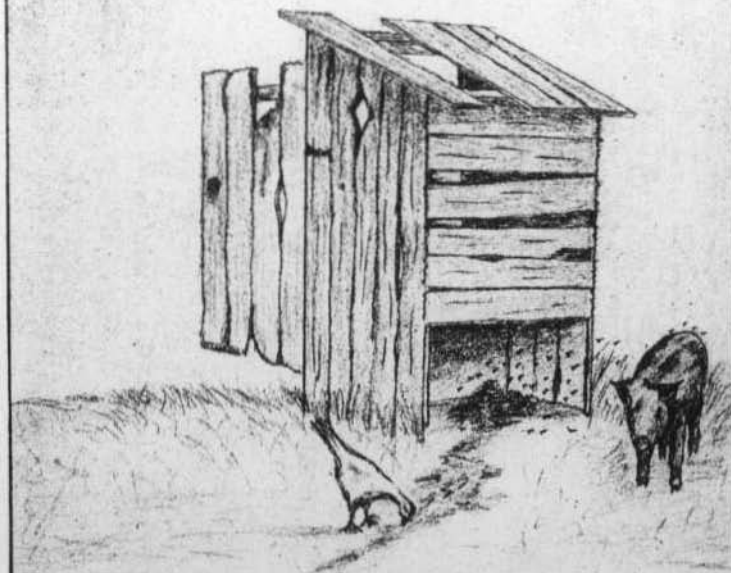
If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

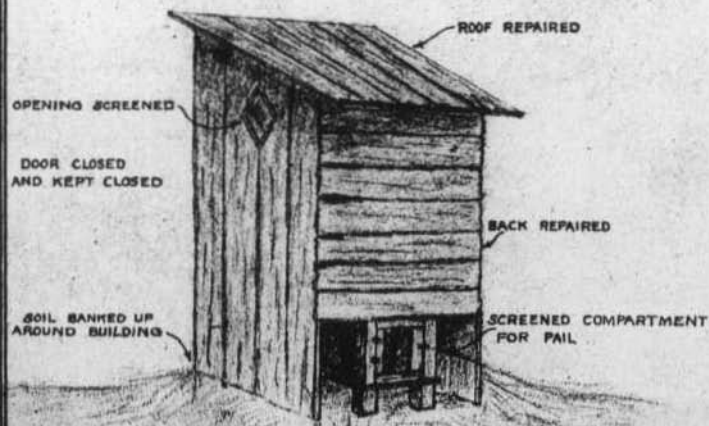
Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

Glennan, Dr. A. H.,
c/o U.S.M.H. Serv. Per.

THE TRANSFORMATION



THAT FILTHY BROKEN-DOWN FLY INFESTED
PRIVY CAN BE REMODELED



INTO ONE LIKE THIS

Simms
16

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.
- Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.
- Publication 158, Malaria, April, 1916, pp. 4.
- Publication 159, Some Poultry Pests, April, 1916, pp. 10.
- Publication 160, Annual Report State Board of Health of Florida, April, 1916, pp. 256.
- Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).
- Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.
- Publication 163, Hog Cholera, pp. 30.
- Publication 164, Annual Report of Veterinary Department, 1915, Reprint from 27th Annual Report of the State Board of Health, April, 1916, pp. 56.
- Publication 165, Annual Report of Crippled Children Treatment, 1915, Reprint from 27th Annual Report State Board of Health, April, 1916, pp. 6, illustrated.
- Publication 166, Vital Statistics, 1915, Reprint from June, 1916, Health Notes, pp. 44.
- Publication 167, What You Should Know About Tuberculosis, Aug., 1916, pp. 32.
- Publication 168, "A Health Sermon," Reprint from June, 1916, Health Notes, pp. 6.

RELATIVE VALUES IN PUBLIC HEALTH WORK

There is nothing more discouraging to a sincere worker than the realization that, because of meager information, or misinformation, his honest efforts may be misdirected. Certainly the authorities attempting to control the recent poliomyelitis epidemic have been conscious of this. To some degree, indeed, all workers for health preservation find a constant source of discouragement in the lack of accurate data on relative values in public health work. In view of the fact that from a fourth to a third of the deaths which occur in continental United States each year are preventable, no public health official can fail to realize that mistaken judgment on his part in the expenditure of the insufficient funds entrusted to him may mean lives needlessly lost. He has to face the problem of inadequate funds and possible political pressure for the misuse of those funds. Still more grave is the danger that, no matter how honest his own intentions, through lack of accurate information, he may still misuse his resources.

Public health protection is a new activity, there are comparatively few up-to-date reference books, and no one man can hope from his own experience to be able to grasp the whole field. In fact, the average health officer often lacks the specific training and length of tenure in his office which would justify him in depending on his own judgment. Such men particularly, and, indeed, all persons who are interested in original contributions to the scientific data on which all useful preventive medicine must be based, will therefore welcome the study of the "Relative Values in Public Health Work" by Franz Schneider, Jr. Schneider, as the sanitarian of the Department of Surveys and Exhibits of the Russell Sage Foundation in New York City, has undertaken this analysis of relative values at a time when such a study is greatly needed. Schneider disclaims any high degree of accuracy for the conclusions which he offers. In the first place, the figures are based only on reports from cities in the registration area. These, unfortunately, include only about 35 per cent. of the total population, and are entirely inadequate as to sickness statistics; but with proper allowance also for the fluctuation of values caused by local conditions, the figures offered are significant both for the originality and suggestiveness of method by which they were worked out, and as offering a sound foundation for a scientifically planned health program. The thesis is that with limited funds a proper choice of activities is of chief importance. The four prime factors by which may be determined the relative value of activities directed against disease are the amount of damage the disease causes, its preventability, the cost of its prevention, and its tendency to become epidemic. Judged by all these criteria, and only in reference to their relative value as causes of death, the following preventable diseases are rated thus:

RATING OF PREVENTABLE DISEASES

Tuberculosis	16.9
Infants' diseases (including diarrhea, enteritis and bronchopneumonia	33.9

1. Schneider, Franz, Jr.: *Relative Values in Public Health Work*, read before the Massachusetts Association of Boards of Health, Providence, R. I., July, 1916; *Am. Jour. Pub. Health*, September, 1916.

Contagious diseases of children.....	30.5
Venereal diseases	9
Typhoid fever	6.1
Other infectious diseases.....	3.4
Neutritional diseases .....	.2
Total	100

There are certain activities indispensable to a health department, although they may only indirectly affect the death rate from these diseases. Such activities are health education, the physical examination of school children, the recording of vital statistics, and the maintenance of dispensaries, clinics and laboratory facilities. The foregoing figures, corrected by making an allowance for these activities and for the other factors omitted in the first rating, are altered so as to indicate, as in the following table the final values of health department activities:

FINAL VALUES OF HEALTH DEPARTMENT ACTIVITIES

Control of tuberculosis	12.1
Control of venereal diseases.....	6.6
Control of all other communicable diseases.....	25.3
Infant hygiene	20.3
Privy and well sanitation.....	3.5
Milk control	2.7
Fly and mosquito suppression	2.4
Food sanitation .....	.1
Inspection of school children.....	7
Vital statistics	5
Education	5
Dispensary and clinics.....	5
Laboratory	5
Total.....	100

Figures of this kind stimulate the reader to instant questions; but it is because of the careful explanations and painstaking justification of the values given that the report is well worth careful study.

—*The Journal of the American Medical Association.*

DENTAL PREPAREDNESS

What is the most important attribute of a soldier?

Good feet? No.

Good eyesight? No.

Good brains? No.

What then?—Good teeth.

A soldier may have good feet, good eyesight, and good brains but if he has bad teeth, he can't eat. If he can't eat he can't march near enough to the enemy to see him and use his brains to fight him.

How does a soldier get good teeth?

By having good teeth in childhood.

How do children keep good teeth?

Through being taught by their mother how to keep their teeth clean and having their teeth looked after while they are growing. This makes good teeth for future soldiers.

It would seem then as though the first patriotic duty of a mother was to keep her children's teeth in good condition.

It is.

URGE MEDICAL EXAMINATION FOR ALL

Plans for the observance of National Medical Examination Day on December 6 were announced today by The National Association for the Study and Prevention of Tuberculosis.

The National Association, together with other organizations, is advocating an annual medical examination for every person, sick or well, and December 6 has been set aside as one of the feature days of Tuberculosis Week, December 3 to 10. Antituberculosis Associations, state and local boards of health, women's clubs and other societies are co-operating to interest everyone possible in the subject of at least one medical examination a year, preferably on this special day. Physicians will make special arrangements to devote December 6 to medical examinations, and clinics and dispensaries will prepare to receive those who cannot afford to pay a physician.

Some of the reasons why the human machine should be inspected at least annually, as given in a free pamphlet on "Periodic Medical Examinations," issued by the National Association are these:

The physically perfect man is almost impossible to find. Almost everyone who has reached the age of 30 has some impairment or defect of his body. Out of 2,000 men and women examined, 70 per cent. were found to have impairments of a more or less serious nature, while all of the remaining 30 per cent. had some defects of a minor character.

Out of the thousands who have been examined and found to be impaired, only 10 per cent. imagined there was anything wrong with them; the remaining 90 per cent. supposed themselves "perfectly well." Many little defects or impairments may be found which, if allowed to continue without treatment, may result in serious and perhaps fatal illness, such as Bright's Disease, tuberculosis, etc.

A thorough physical examination is not expensive, and it is worth the cost to know where one's health account stands. If an inspection of your body reveals a little break that can be repaired for a dollar or two, which is cheaper: to let that little break continue until it becomes chronic tuberculosis, cancer, or Bright's Disease, which will cost hundreds of dollars to treat and which may never be cured—or to stop it at its very beginning?

The time to prevent disease from sapping your vitality is before it gets a foothold. The best way to discover disease early is to have a periodic overhauling of your body, at least once a year.—*Press Service Nat'l Ass'n for the Study and Prevention of Tuberculosis.*

BETTER BODIES NEEDED

That better bodies is one of the country's greatest needs is evident from the large percent of rejections made recently in the American army on account of physical unfitness or defects. An exchange says that at least 80 percent of all who present themselves for enlistment are found physically unfit, some of the defects being narrow chests, flat feet, poor teeth, heart trouble, weak eyes, defective kidneys, under weight, and stomachs that are in no condition to master army fare.

"From this, it seems," says the State Board of Health, "that the old injunction 'to crucify the flesh' has been taken too literally in America, with the result that much of our manhood when tested is found unfit for the country's service. Too little attention has evidently been given the body and the body needs. In fact, the body has not had due consideration while the appetites and other pleasures have been indulged at the expense of the body's welfare. The candle of life has been allowed to burn at both ends with wrecked bodies and inefficient service for their country as a result."—*Press Service North Carolina State Board of Health.*

NATIONAL BOARD OF MEDICAL EXAMINERS

The National Board of Medical Examiners held its first examination from October 16 to 21, in Washington, D. C.

There were thirty-two applicants from seventeen states, representing twenty-four medical schools, and of these sixteen were accepted as having the necessary preliminary and medical qualifications, ten of whom took the examination.

The following men passed:

Dr. Harry Sidney Newcomer, Johns Hopkins University

Dr. William White Southard, Johns Hopkins University

Dr. Orlow Chapin Snyder, University of Michigan

Dr. Thomas Arthur Johnson, Rush Medical School

Dr. Hjordleifur T. Kristjanson, Rush Medical School

The second examination will be held in Washington, D. C., June, 1917. Further information may be had by applying to Dr. J. S. Rodman, Secretary, 2106 Walnut St., Philadelphia, Pa.

Don't take the wrong view of life. Remember that many a Ford is envied by a wheel barrow. Your troubles are not the most pernicious ones. Some poor guy would exchange and be glad to pay the boot. Just keep a plugging. The moon changes every quarter and when the man up there does get full he shines with much glory. Your day will come. So cheer up and get a grin.—*The Key West Morning Journal.*

MULTUM IN PARVO

One-third of the fools in the country think they can beat a lawyer expounding the laws. One-half think they can beat the doctor healing the sick. Two-thirds of them think they can put the minister in the hole expounding the gospel, and all of them think they can beat the editor running a paper.—*Carolina Square Deal.*

Health Briefs

Buy Red Cross Christmas Seals and thereby aid in the fight against tuberculosis.

Proper feeding promotes health; overfeeding promotes disease.

The best chance to get well of tuberculosis is while the disease is in its incipency. Too often the first symptoms are put off as a "little cough" or "cold."

If everybody slept out of doors for five years, it is believed by health authorities that tuberculosis would disappear.

THE UNITED STATES PUBLIC HEALTH SERVICE ASKS
DO YOU

Believe in national preparedness and then fail to keep yourself physically fit?

Wash your face carefully and then use a common roller towel?

Go to the drug store to buy a tooth brush and then handle the entire stock to see if the bristles are right?

Swat the fly and then maintain a pile of garbage in the back yard?

Maintain a polluted well and then complain about the undertaker's bill?

Think screening is too expensive and then blame your malaria on the climate?

Insist on sanitary cigar factories and then use a public cigar cutter?

Carry a fine handkerchief and then forget to cover your mouth when you cough?

Sanitary Engineering Notes

RURAL SCHOOL SANITATION

By GEORGE W. SIMONS, JR., *Chief Bureau of Engineering*

According to the Federal Census as of April 15, 1910 there were in the rural districts of Florida, 115,968 children between 6 and 14 years of age, 63.6 per cent of which number or 73,810 were attending schools.

The earliest days spent in school represent a formative period when the mind of the child is in a passive state to easily acquire, copy and retain permanent ideas, thoughts, associations and habits which to an appreciable extent mold the future man or woman. At the early school age the first lessons are taught in the fundamentals of education and living, at an age when the influence of the environment is a very weighty factor exerting a powerful effect on the young, developing mind.

Association is a potent element swaying the youngest maturing mind. In the rural school the youngest child is continually associating with those older and by this association soon learns to copy or imitate the latter. These first mannerisms acquired by association and imitation are constantly employed throughout the period of years from 6-14 when the body is attending the school. A group of older children carelessly disposing waste paper on the floor or ground, casting remnants of lunch about the premises, drinking unsafe and dirty water from common drinking cups, all furnish food for the eager embryonic mind to imitate. Thus it is readily seen that fundamentally the environment has a perpetuating influence on the mind of the child through the agencies of constant association, imitation, and repetition until finally the child of six has attained the 14th year, the habits of eight years practice have been so firmly fixed that the activities and modes of conduct of the earlier years are carried to the home where they are little changed in future years.

A small percentage of the "graduates" from the rural district schools enter the higher city school to be further trained and there have their earlier ideas modified or wholly ejected, but the large percentage who never reach the city or town school should also receive a proper environmental training. For this reason our rural schools should be models and lessons in sanitary teaching, should stand forth as beacon lights to educate the youth in the lessons of better and more wholesome living. The teaching of personal hygiene by means of influential environment, sanitary school buildings and equipment is of fundamental significance.

The child's body as well as its mind attends the school and therefore the body should be properly trained, developed and cared for. If the child is taught the lessons of sanitation by means of its environment and subsequent habit the principles of personal hygiene become second nature and preventive medicine can thus be more thoroughly appreciated and understood. Prof. Rosenau says: "The combination

of compulsory education and schools, having an unbalanced curriculum or impure water or vitiated air or improper sanitation, is nothing short of a crime by the State against the State. The child profits directly from attendance at a school which has due regard for the child's physical well being and the development of his character; the State profits indirectly from the lessons in sanitation and hygiene which are carried into the child's home, and are applied as a matter of course in the home of the future citizen."

SITE

A rural school should by all means be favorably located conveniently and centrally situated in the district to be served. The site should be on dry ground remote from any low or swampy places, removed from barnyards, slaughter-houses or other offensive places emanating foul odors polluting the atmosphere. The site should preferably be on high, well-drained land of sufficient area to allow for play purposes. The play ground should be well graded, drained and free from depressions which would retain pools of water. For aesthetic reasons shrubs, flowers and vines should be planted and encouraged. Substantial structures well placed have a decided effect on the young mind.

BUILDING

After due deliberation has been devoted to the site selection, building plans must be considered. The building should be constructed of a good material built in a substantial manner, the size sufficient to accommodate the number of pupils in the district but not less than 25x30 feet in ground plan area generally 15-18 square feet of floor area is allowed per pupil attending. No room should have more than 30 pupils under the supervision of one teacher. In order to secure an ample cubical air content a room not less than 11 feet in height should be planned—many States placing this minimum at 12 feet.

The orientation of the school building is of prime importance. The building should be placed on the lot for the attainment of maximum illumination efficiency, so that during some portion of the day sunlight will be admitted because of its germicidal properties. Schools having a north or south frontage secure the most sunlight.

CLASS-ROOM EQUIPMENT

The walls of the class-room should be plastered and tinted with a suitable and agreeable color giving a pleasing effect, absorbing the least light, not taxing to the eyes and at the same time giving a maximum reflection. Above all else, glaring walls should be avoided, gray or light green walls with cream ceilings to be recommended.

Floors should be of a good, well-planed, hardwood, preferably laid in widths not exceeding two inches. At occasional intervals the floor should be treated with an oil for preservation and dust settlement.

Window shades are of importance in restricting the strong sunlight and should be of a translucent material hung from either top or bottom, preferably the former. Opaque shades should be avoided. If possible the translucent shade should be supplemented by an opaque one between it and the light source to shut out direct sun rays.

Careful attention should be directed to the blackboards to acquire the proper width, material, at a suitable height, and receive the most favorable light. Slate is the best and cheapest material in the end, although several compositions are on the market. Blackboards should be 4 feet in width and placed on the wall so that the bottom of the board is 33 inches from the floor level. Blackboards should not be placed on walls having windows.

The most important part of the school furnishings is the desks and desk chairs. A child spends so much of his time in school that unless the proper sort of desk and desk chair is provided defective eyesight and postural defects will result. The desk should be adjustable in order to allow the feet of all children to rest squarely on the floor, the chair being at a proper distance from the desk top. Some authorities place the latter distance at 1-6 the height of the body. The back should be at right angles to the seat and extend to the shoulder blades, curved concavely from side to side and convexly from above downward. Moreover, the desks should be so arranged to give the greatest sight facility, still separate the pupils sufficiently. The desk selection for a rural school demands utmost care and attention.

LIGHTING, HEATING AND VENTILATING

In the average country school of one room, light generally is admitted by windows on both sides. By all means no windows should be placed in the end or side, toward which the children are facing. The ideal method is the admission of light on the left side and rear of the assembly hall, using the opposite side for blackboard space. The light must be of the proper intensity, not too strong nor too dim to be hurtful, but equally diffused.

Heating of rural schools in Florida is commonly accomplished by the use of a closed stove, in the center of the room. The stove should not be placed too near the pupils' desks. The surroundings should be kept clean and neat to promote the sanitary conditions.

Ventilation of the rural school is generally acquired naturally by means of open windows, but this is often impossible owing to the varying winds. Screened vents should be installed in every school to allow for the proper supply of fresh air and removal of stagnant air. Bad, vitiated air produces injurious physical results. For most purposes it is proper to allow 30 cubic feet of air per minute per pupil or 1,800 cubic feet per hour. This can be secured by the gravity or natural ventilation system. The inlet and outlet for air should be placed on the same side of the room, the inlet about 8 feet above the floor and the outlet should be 6-8 inches from the floor. About 20 square inches of vent should be allowed per person, that is for 30 pupils a vent 4.2 sq. feet in area would serve.

WATER SUPPLY

The source of a rural school water supply and its method of serving to the pupils is very essential. Each school should have on the grounds a deep well, cased and protected, offering an ample supply possessing an unimpeachable quality. The deep cased well is to be preferred to the shallow well which is a constant, potential source of danger. The

deep well should be located at a place easily accessible by the pupils, yet removed far as possible from the privies or any other potential source of contamination. If the ground is sloping the well should be placed in the highest level and remote from the privies. The well should be sufficiently protected by a square area of concrete elevated slightly with the surrounding ground carefully graded to the concrete thus eliminating a muddy approach and a natural drainage away from the well. Too often the water is carried in pails from an infected or contaminated well nearby, from a badly polluted supply. The child needs a good quality of water above all else, water coming from an unquestionable source. Moreover the supply should be properly kept in the school building, in a special, closed container or cooler. The open, rusty, battered pail should be discarded immediately, also the common drinking cup. The latter is used altogether too commonly in our schools.

Professor Davidson, of LaFayette College, found human cells from lips on the upper third of a common drinking glass in one school—moreover he found germ cells left by saliva deposited while drinking. Individual cups or glasses brought from home should be encouraged in each school, the teacher should also at the beginning of the term give an explanation of the dangers arising from the use of the common cup so that the child will realize and appreciate the necessity for the use of an individual glass.

In the larger schools sinks should be provided for the washing of hands and face after play and after lunch to encourage personal hygiene.

PRIVIES

Laws of Florida Chapter 6836 (No. 30) presents an Act providing adequate facilities for nature's conveniences. It requires that all surface closets in rural districts shall be of fly-proof construction and in conformity with plans recommended or approved by the State Board of Health. The privies recommended by the Board are of the "pail" or "pit" type.

The following are the important points in construction of either:

1. The roof shall be water-tight.
2. The house shall be without cracks through which flies may enter.
3. The door shall fit closely and shall be self-closing.
4. The seat shall have self-closing, hinged covers over each opening.
5. The vault shall be closed by a tightly-fitting hinged door.
6. A water-tight (preferably galvanized metal) pail or tub shall be placed under each opening of the seat. The top of this pail should be not more than one inch below the seat.
7. All openings for ventilation, etc., shall be screened with wire netting.

The pit privy should be used only in a very sandy soil and then with a pit lined on all sides not exceeding three feet in depth. Further information concerning privy location and construction can be secured by addressing a communication to the Bureau of Engineering.

The open back privy where the discharges are received on the bare ground surface are too numerous in our rural schools, moreover are located within too close proximity to the school assembly hall. This condition should be remedied and the screening law fully observed. A properly constructed out-house or privy where the discharges are received in a metal pail or satisfactory pit, the entire compartment screened and the seats equipped with self-closing covers—the entire structure waterproof and substantial, will convey a very important and emphatic lesson to the young mind, educating him in the proper method of excreta disposal to be employed at home as well as at school.

The location of the privies should also receive due attention. The privy for girls and the one for boys should be as far removed from each other as possible, both being properly screened for privacy. Each privy should be at least 100 feet apart, also about 100 feet from the building and if placed on sloping ground should be on the downward slope away from the water supply well.

Cleanliness should be emphatically impressed on the young mind in order to teach them the proper use and care of the toilets.

REFUSE DISPOSAL

The indiscriminating, careless depositing of paper, lunch remnants, lunch boxes, shavings, etc., around the floors and yards should be avoided. A tightly covered, metal can must be placed in each room and the children taught the necessity of placing all refuse therein. The indifferent method of casting discarded material "any old place" leads to slovenly habits which by repetition are imparted forcibly to the child. Moreover such semi-filthy conditions attract flies and thus may later convey disease. A galvanized iron garbage can placed in each room would soon remedy this situation, the contents to be burned daily.

Above have been enumerated the most important features of rural school sanitation which may be applied to every school in Florida without an exorbitant expenditure of money. The foregoing items if installed will result in a clean, hygienic environment which will have a lasting and decided effect on the mental capacity of the child and will in the end start the real public health education with the youngest of the generation.

REFERENCES

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- Technical World Magazine, August, 1908.
- Handbook on Sanitation.
- Public Health Bulletin, No. 77, U. S. P. H.
- Public Health Reports, February 7, 1913.
- Public Health Reports, July 30, 1915.

SWELL SWILL

Mandy, the old colored woman who comes in to help by the day, was engaged in clearing away the dinner table after a bounteous repast, which had included a huge watermelon among other good things of the season.

As she passed through the doorway, carrying in each hand a well-filled can of the glistening melon rind, she turned and, rolling her eyes over in my direction, said:

"Miss Fanny, would you min' if I carried home one o' dem cans?"

"Why, no, Mandy," I replied; "but what in the world do you want of it? You don't keep pigs or chickens."

"La, no, Miss Fanny; I don't keep no pigs," said she, laughing until her fat sides shook. "I jest want to make de neighbors jealous. Dey don't nebber hab no sich garbage as dis settin' outside deir front steps!"—*Saturday Evening Post*.

STATE PLUMBING CODE

A State Plumbing Code will furnish a firm foundation upon which to build all city ordinances pertaining to plumbing.

A State Plumbing Code will insure more satisfactory, economical and reliable work throughout the State and eliminate "shoddy" installations.

A State Plumbing Code will unify and simplify all plumbing installations in Florida.

A State Plumbing Code will mean economy and efficiency and result in uniform practice among architects, plumbers and plumbing inspectors.

Mr. Groeniger, State Inspector of Plumbing, Ohio State Board of Health, says:

"No humanitarian, social, moral, financial or sanitary argument can be adduced against the enactment, enforcement and standardization of plumbing codes by state or nation which will mean simplicity, economy and efficiency.

"The standardization of plumbing regulations will not only eliminate commercially interested individuals and corporations, but any other organization whose interests are from a purely selfish motive.

"The plumbing in buildings is not strictly a requirement affecting the safety of the structures, nor has it to do with the thickness of the walls, carrying weight or fire hazard, but it does directly affect the comfort, convenience, and health of the occupants and the installation, supervision and inspection should be from a health and not a building standpoint."

Recently, in reply to a letter from the Chief of the Bureau of Engineering, a plumbing inspector in one of Florida's rapidly growing cities says:

"To illustrate in a few words the benefit of such a code: If the plumbing and sewerage system of the City of X—— installed prior to the enforcement of the present city code had been installed and executed in accordance with the requirements of a *State Code*, the individuals and City would not, at present, be confronted with the necessity of spending thousands of dollars in replacing unsanitary installations."

All persons interested in a *State Plumbing Code* are requested to write their opinions to the Bureau of Engineering in order that popular sentiment may be ascertained.

Correspondence

LAW FOR MEDICAL INSPECTION OF SCHOOL CHILDREN FAULTY

Dr. Joseph Y. Porter, State Health Officer, Jacksonville; Fla.

Dear Doctor: As Secretary of the Board of Trustees of the county high school of this place, I desire the following information: School opened here the 18th inst., and there are at least two children who have a "breaking out." We deem it necessary that the children in this school should be examined right away at last to determine whether or not there is any contagious disease. I notice Chapter 6829 Laws of 1915 provides the manner in which same should be done. I discussed the matter with..... this morning and he advises me that he was one of two physicians named by the County Commissioners shortly after this law was enacted to make such examinations, but he understands that they will only be paid 10 cents each, which is so small that examinations have not been made except where it was deemed very urgent indeed. Please advise me how I shall proceed to have the examinations made, by whom, what will be paid; and if the physician is to fill in blanks, kindly forward blanks or give instructions as to what kind of examination should be made. Your early attention will be appreciated.

Very respectfully yours,

Jacksonville, Fla.

Dear Sir: Replying to your letter of the 20th, I beg to advise you that I have today instructed Dr. E. M. Brevard, Assistant to the State Health Officer, in whose district Marianna is situated, to visit your school at his very earliest convenience for a thorough investigation of the eruptive disease which has appeared there, and for the institution of whatever measures may be necessary for its control.

The routine inspection of school children is provided for by a law passed by the last session of the legislature. This statute, however, was passed without the knowledge of the State Board of Health and is exceedingly faulty, in many respects. It provides for the appointment by the county commissioners of physicians who shall act as school inspectors, but whose services are paid for by the State Board of Health. The law further provides that no physician shall have under his charge more than 2,500 children, which would require in the State, about one hundred inspectors. No special appropriation was made to cover this expense, and it is manifestly impossible for adequate compensation to be provided for from the State Board of Health fund. Under these circumstances, and after carefully considering the matter, the Board deemed that 10 cents per capita was as much as could be possibly spared for this single line of work, though it is realized that this amount will not much more than pay the expense incurred by the inspectors. However, in many of the counties of the State, the physicians appointed by the County Commissioners have been willing to undertake the work at this figure, merely from a humanitarian standpoint, even though, in many instances, the examinations are made at a financial loss to themselves.

In all instances where communicable disease occurs the Assistants to the State Health Officer will be promptly detailed to investigate the outbreak and institute measures for its control, but the routine examinations must be handled in accordance with the provisions of the law as outlined above.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

WHAT TO DO IN CASE OF DOG BITE

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: I have a patient bitten by dogs on the 20th. I treated locally as much as patient would allow, and there are no serious local or constitutional symptoms; but I beg to ask your advice as to Pasteur treatment. Has the Board any arrangement for such treatment, or can I secure the virus from State laboratory? The dogs were healthy as far as known; the owner killed one. May I ask if the other should be sent for examination and where? Would you advise Pasteur treatment under these conditions? I assure you any suggestions will be appreciated.

Yours very truly,

Jacksonville, Fla.

Dear Doctor: I have your letter of the 22d with regard to a patient bitten by dogs on the 20th inst. It is very unfortunate indeed that the owner should have killed one of the dogs, as these animals should have been confined and kept under observation for a week or ten days, in which time definite symptoms will certainly develop, if the dogs are rabid. In fact such animals usually die or show marked evidence of rabies within three to five days.

If the dog which was not killed remains healthy, I think there is very slight probability of either of the animals having been rabid at the time the boy was bitten. However, it is, of course, impossible to state this with certainty, since one of the animals was killed, and to be upon the safe side, it would probably be wise to administer the Pasteur treatment. This treatment may be ordered through this office, at the cost price of \$20.00 per treatment.

If you wish treatment ordered, kindly advise me to that effect, stating age of patient and location of bite.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

GROUND ITCH IN FAMILY

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: We are seven in family, and every one of us has the itch on the feet. First my oldest boy was affected; started to itch and then got to be blisters. Some of them looked like a worm, and broke open, the toes being all raw with pimples. Now all of us have it, and it seems to me to be contagious, for just as soon as one baby had it the other had it three days after. We have no doctor here and can not afford to get one, and we don't know what to do. The itching and pain is almost unbearable. Please, if you can, tell us what to do.

Yours very respectfully,

Jacksonville, Fla.

Dear Sir: I am in receipt of your letter of the 18th with regard to the itch from which your entire family is suffering. From your description of this trouble, it would appear that your children have contracted "ground itch," which is the initial stage of hookworm disease. Under separate cover I am sending you publications 118 and 127 of this Board in which you will find full information regarding this disease.

There is very little that can be done for the local condition of the feet. Probably the best thing you can do is to use a weak solution of carbolic acid, probably 2 per cent, which may afford a little relief. It must be understood, however, that this treatment is purely local and will not have any effect upon hookworm disease.

If you wish, I shall be very glad to supply you with containers in which specimens may be mailed to our laboratory for examination to ascertain if hookworms are present in the intestines.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

MEDICAL PROTECTION

Do you know that Florida is today the dumping ground of fake doctors and low grade medical schools. To be sure we have some excellent doctors, but the laws are such that the sects are protected without a standard qualification and without anybody saying to them, "Are you very well qualified?" Why is this? It is because the people do not take interest enough in such matters to demand legislation to protect the people. The various sects are constantly on the alert and looking for legislation to protect the sectarian doctor. They want and ask for low qualifications, they say every man should have a place in the world to make a living. To make a living at your and my expense! At the risk of our lives!

If the state has not proper safeguards any man with pleasing personality and tact may work up a practice and make thousands of mistakes without the world getting on to it. What do you think about this? Is it right? Better speak to your representative about it and see that he protects us right away. There should be one standard for all doctors who make a diagnosis and treat disease no matter what his system may be. There is no "cure all" in medicine and until then diagnosis of disease is necessary.

A man who is unqualified may overlook a serious disease and neglect conditions where there is still hope. This is one of the grave dangers of having uneducated observers. It requires great powers of observation with all the experience we can muster to make a moderately good doctor. To be sure there are four medical boards in the state, but upon investigation you will find their standards are kept lower than most any of the states. It gives the poor boy who is working up a better show to require less of him, but is it worth the price to any of us to educate the poor boy just this way? Then it should become the business of the universities. The state should require of a man evidence that he is not practicing simply for money and that he is of good moral fiber. The state should require certain tests of a man who comes into our homes and passes upon life and death problems above those required in most other walks of life. The laws are not for the doctors they are for the protection of the people. When some serious problem comes along we may be disgusted that the doctor does not know more about his business, we are not satisfied. It is up to the public to demand good physicians and if the tests are not made of a high standard how can the public consistently blame anybody but the public?—Daytona Gazette-News.

THE FLY SWATTER

Where do you keep your fly swatter? In some cases it is kept on the kitchen table or laid across the toaster! In a local hotel it was found on the babies board of a high chair! After killing a few thousand flies filled with typhoid and other germs the placing of the fly swatter becomes a matter of consequence. Think it over and tell the maid and remind yourself that the fly swatter should be kept clean and in a safe place away from food and any chance of carrying disease to members of the household.—Daytona Gazette-News.

BOOSTING LAKE BUTLER

Editor Powell of the Lake Butler Times is working hard for the upbuilding of his town and while admitting the importance of having an electric light plant for the place thinks there should also be provision for an ample supply of water and sewerage system. That the proposition is well taken

must be admitted. Lights are important, but if the average property holder were asked which were more important water or lights, the answer must be water. A sewerage system is something that adds materially to the health, builds up and advertises. Editor Powell should keep up his good work and he will ultimately secure for Lake Butler all of the so-called "modern conveniences," which really means securing the actual necessities in the march of progress.—Florida Times-Union.

HEALTH OFFICER VISITS SEBRING

Sebring was honored Tuesday by a visit from Doctor Young of Plant City. This gentleman is in charge of the work of this district as far as the State Board of Health is concerned, and it is his mission to visit the various towns and see in what condition the sanitary matters are. It is for this reason that Dr. Young came into Sebring and his visit may prove beneficial in the extreme.

Dr. Young was well pleased with the general appearance of Sebring, but he stated that there were some things should be done here and done at once. He simply strengthened the position taken by the White Way not long since that the weeds should be cut down, some of the back yards should be cleaned up and better sanitary rules should be observed. We have said we wanted to see such as this done, and have called the attention of our people to same, even urging a clean up week on several occasions.

Now, good people this messenger from the State Board of Health comes along and advises the same thing. It is up to us to act, or we are going to be requested by the State Board to get busy. Let us not wait for this, but get down to business on our own accord. Dr. Young will visit Sebring in November and be accompanied by a sanitary engineer, who will dig down into the unsanitary conditions. Let us clean up and be ready to show him a clean town.

Getting to the needs of Sebring, Dr. Young stated that he hoped to see the weeds cut down, the back yards cleaned up, and then a sanitary ordinance passed that would cover the sewage proposition that is confronting us. Would it not be wise for the city council to take a good look at the conditions and at their next meeting pass the proper ordinance covering this sewage condition? We hand this out for your consideration. We are pleased to have this visit, and trust we shall be in shape to please Dr. Young on his next visit.—The White Way.

TO CONQUER WHITE PLAGUE

If there are children in a family where there is tuberculosis, they can be protected by scrupulous care and may remain healthy and strong, says Dr. S. Adolphus Knopf in the Medical Record. This care must consist not only in avoiding sources of infection, but by developing the child into a physically strong being which can resist the invasion of the tubercle bacillus.

The mother should make an open-air baby of each of her children, feed them carefully and plentifully, keep their skin scrupulously clean, following the warm bath for the babies with a rapid rubbing with her hands dipped in cold water. The open air kindergarten and the open air school are the only proper places to educate a child predisposed to tuberculosis.

Teach such a child breathing exercises; do not bundle it up, but dress it comfortably, according to the season. At the time the girl grows into womanhood do not compress the organs in the chest and abdomen by tight lacing.

It goes without saying that the mother, in no matter what station of life she may move, should also dress sensibly, and never again wear the trailing skirt which collected from the sidewalk tuberculous sputum and dirt containing the germs of diphtheria, pneumonia and consumption, to be later on deposited on the carpets of the children's playroom.—Apopka News.

Veterinary Notes

TICK ERADICATION

(Being an Address delivered by Dr. Chas. F. Dawson, at the opening of the Armour Packing Plant, Jacksonville, October 19th, 1916)

It is universally recognized that there is no reason for producing a commodity for which there is no market.

The citrus fruit, vegetable and all other plant crops would be limited to the requirements of one's own needs if there were no market for them, and the beautiful State of Florida would be a howling wilderness inhabited largely by wild animals. There would be no cities or large towns and no railroads nor steamship lines. Florida would be unknown except as a distant frontier State; whereas, today, Florida is one of the best known States in the Union. A million people from all parts of the world come here every year, looking for health, relief from the rigors of other climates and for investments. Many of these visitors, some of which are settlers, remain here, attracted by the climate and opportunities for making money. It is this class of people who have, in the past, made Florida what she is today. This evolution has been in progress for several hundred years, and yet Florida has not yet attained that greatness, as a State, to which she is entitled. She will never attain that greatness until her people learn to utilize her raw materials by converting them into the finished product instead of shipping them out to be manufactured elsewhere; in other words, we are sharing profits that should be kept at home.

The signs of the times are that Floridians, as well as others, are beginning to realize that some of Florida's raw products can just as well be manufactured here as elsewhere. This splendid packing plant erected here by the Armour Packing Company, of Chicago, at an expenditure of a quarter of a million of dollars, is a convincing argument that this well-known firm is sure of the future of the animal industry of the State. This firm is known the world over for its business sagacity and Florida cattle growers may rest assured that it was confidence in them that caused the erection of this plant. The Armour Company know that meat is, always was, and always will be in demand. The demand for citrus fruits is not so urgent, because they may be considered a luxury, while meat is a necessity. The world's visible supply of meat is always short. The market is never glutted; hence, the price of meat remains more uniform than does the price of plant foods, because of the variability of production.

Every good thing has its drawbacks or enemy. There are devastating diseases in the plants which wipe out a man's whole crop if he fail to use some means of control. Likewise, but not to so great an extent, there are diseases of animals that, at times, threaten the existence of a whole flock, if left to run their course unchecked. Cotton has its greatest enemy in the boll weevil, citrus fruits have their greatest enemy in the citrus canker. Corn, oats, potatoes, pears, all have their disease-producing enemies. Most of these can be controlled, while others simply put the farmer out of the business of growing that particular crop, or makes it unprofitable for him, as the disease-producing element can not be eradicated, except at an expense which makes it a question whether he should continue in that business, or go into some other. This is particularly true of the cotton-destroying boll weevil. This pest is now within this State, and, in a few years, will, as it has in other States, partially destroy cotton growing.

Then what are we going to do? We have the lands. We can grow the best animal feeds known in the world. We have the purest water in the world. We have a climate free from blizzards, destructive floods and droughts. We have a hardy race of animals upon which to quickly build a great live stock industry, and a people who know how and are willing to do it: BUT we have, at the same time, as in plants, an animal pest for cattle which will prevent our doing these things, so long as we allow it to remain

in the State. This pest is the abominable cattle tick which has infested the cattle of this and other States since the Spaniards first landed tick-infested cattle here. It costs Florida and the other Southern States a hundred million dollars a year in cold cash losses. It prevents the production of good cattle; it restricts immigration; it puts a damper on all agricultural operations; it drives the boy and girl from the farm; because farm life is not attractive without cattle; it helps to keep the soil poor, as cattle are the best means of producing and retaining soil fertility. Cattle can not thrive and multiply in natural numbers on tick-infested pastures.

Although this pest, the cow tick, is doing so much harm there is nothing easier or simpler than its entire extermination. We know from experience that we can, as a rule, only control other pests; but here is an insect-pest that can be eradicated in the short space of time of about five months if we go at it in a regular and systematic way. It makes no difference whether the work of extermination be carried out on a single farm, or a county, or a State, or the whole tick-infested South. The method and time required would be the same. If so easily done, does it not seem strange it may require ten years when it can be done in six months. The answer is, that it takes time to convince the people. The tick has been here so long, and the old methods of raising the piney-woods, \$15.00 steer, is so easy, that many want no change. All sanitary innovations work a few hardships and interfere with a man's established method of running his business. A few have made big money. They therefore are willing to rock along in the old way.

Times are fast changing. Cut-over lands are paying nothing to the owner, and he pays the taxes. The fellow who grazes his herd on them but does not own the land, is the only one who is realizing anything. These immense ranges are being fenced. Cattlemen who have been grazing their cattle upon them, free, are given the option of selling their cattle or moving them to other unfenced ranges. These large land owners are a unit in proclaiming that the tick must go. They are building dipping vats, building silos, planting forage crops, purchasing pure-bred bulls, and are getting ready to go into the cattle-growing business right. These are the people who will make some real money and at the same time help largely in making this plant a success. Their success will stimulate our more backward cattlemen to imitate them to the extent of their ability. When the little fellow notes that the big fellow is shipping his graded cattle here and receiving three times as much as he does for his piney-woods scrubs and has not gone to very much more trouble and expense to produce them, and realizes it was by exterminating the tick that this transformation has come about, he will quickly decide to get rid of his ticks, buy a good bull with the money he obtained for ten of his scrub cattle, and also get in on the money end of his business.

Tick-eradication is not alone a governmental duty. It is everyone's work,—one gigantic, co-operative effort requiring private, city, county, state and government aid, not only with money but men who can act as leaders and teachers. When all these interests pull together, the work is done. The tick will melt away as snow before sunshine. In his sanitary work, as in all others, the doubting Thomases, the chronic kickers, the know-it-alls and the wilfully-blind and obstinate ones are more of a problem to solve than the real work of extermination. These will, however, as has been the case in other States, gradually disappear before the wheels of progress and when once converted to the idea, will, quickly enough, climb aboard the tick-eradication band wagon and help in the trumpeting.

We have said the work requires the undivided loyalty of all classes, and this work in Florida is beginning to receive.

The Federal, State and County government, aided by private subscriptions, have cleaned up Broward and Dade counties, of the tick. Escambia county, with the same kind of aid, is now about ready to start systematic dipping of cattle under Federal direction.

The State Board of Health, which I have the honor to represent here today, has done, and is doing, all it could, with its limited means for such work, and will continue its efforts to the extent of the means at hand.

It is hoped and expected that the coming legislature will provide an

ample appropriation for pushing the work of tick eradication in Florida to a rapid conclusion. There is good reason to believe the work can be carried on faster in Florida than in any other State, because dipping can be done the year round and because the tick does not lie dormant for such long periods as in the colder parts of the South, but hatches out more nearly on schedule time. Also because there are fewer cattle owners than in other States having as many cattle. This means there would be comparatively fewer objectors. The example set by the large owner would also act as a stimulus to the small owner to go and do likewise.

TICK TICKS

The following from a government publication relative to the depredations of the cattle tick, is a severe arraignment, and shows, in a few words, good reasons for exterminating the pest:

The Texas fever cattle tick lays from 3,000 to 5,000 eggs a year.

Ticks suck as much as 200 pounds of blood a year from a 1,000-pound steer.

Ticks reduce a cow's milk 18 to 42 per cent, a loss of 7 to 15 cents a day to the farmer.

Ticks get the benefit of part of every pound of feed, hay, and concentrates infested cattle eat.

It costs the South \$50,000,000 a year to board the ticks on cattle.

Driving cattle through arsenical dipping baths kills Texas fever ticks and lets the animal grow.

Louisiana and Mississippi have made ticks illegal by requiring every county to dip all cattle.

Two hundred and ninety-four thousand and fourteen square miles of territory have been freed from the cattle tick by dipping, but 434,529 square miles remain to be freed.

Tick eradication is proceeding rapidly, because people would rather have nickels in their pockets than ticks on their cows.

The cattle tick which carries splenetic fever is known to science as *Margaropus annulatus*. The cattle fever tick, however, is a good enough name to use in its epitaph, now being written by the dipping vats.

All ticks do not transmit the parasite which produces tick or splenetic fever. Only one species carries the disease, but it is easier to kill all blood suckers on cattle than to pick out the worst kind. Give the cattle the benefit of the doubt.

Tick or splenetic fever is caused by microscopic parasites which get into the animals' blood and attack and break down the red blood corpuscles. When a mother tick sucks blood from an infected animal she ingests some of these parasites, and these get into the eggs and continue in the seed tick which hatches out. The seed tick passes the disease to the first susceptible cow or steer from which it gets its first meal of blood.

Cattle ticks are great survivors. Many of them survive temperatures as low as 20 degrees below freezing, while eggs if protected by grass or similar material may survive zero weather. Seed ticks can live in the grass for three or four months in warm weather, and for eight months if winters are included, without food. The longer they starve, however the hungrier they get for cattle blood. Starving ticks out is the slow way. Dipping cattle in arsenical baths kills the ticks at once.

The cattle tick lives on the outside, but gets its living from the inside.

A tick-infested steer weighing 730 pounds was freed from cattle ticks by dipping. In two months, with the same kind of feed, it gained 285 pounds. The owner was then feeding the steer instead of the ticks.

Ticks reduce the value of hides. Hides that have been punctured by ticks are usually graded as No. 4 quality, while the same hides if free from ticks would grade as No. 2. This depreciation averages about \$1.25 a hide.

A dairyman in a heavily infested territory dipped his herd of forty-two cattle. One week after dipping the cows gave ten gallons of milk a day

more than before. The milk sold for 35 cents a gallon, \$3.50 more per day from his herd. He has begun to feed the cows instead of the ticks.

Nine hundred and thirty-three counties were under quarantine on July 1, 1906, because of the cattle tick. By September 1, 1916, the use of arsenical dipping baths had cleaned the ticks from 396 counties and thirty-one parts of counties.

The first federal appropriation for the eradication of tick fever was \$82,500 made available July 1, 1906. This appropriation has been increased from time to time, until \$632,400 of federal funds is made available for the fiscal year ending June 30, 1917.—United States Department of Agriculture.

Summary of Public Health Administration, October

WEST COAST DISTRICT

- Tampa: Routine work, office of Assistant to the State Health Officer.
 West Tampa: Differential diagnosis in supposed paralysis case.
 Hillsborough County: Differential diagnosis in scarlet fever case which proved to be scarlet fever.
 Safety Harbor: Sanitary inspection; health conditions investigated and stores inspected for screen law.
 Largo and Clearwater: Investigation of trachoma cases; inspection of schools; examination of several cases of trachoma and diagnosed as such; investigation history of one case.
 Dunedin: Sanitary inspection of town; stores inspected and health conditions investigated.
 Tarpon Springs: Sanitary inspection of town; Greek settlement inspected, stores and general condition investigated and advice given.
 New Port Richey: Inspection of school; open closet found; copy of law sent to trustees.
 Brooksville: Sanitary inspection of town; inspection of Arepeka rural schools; letter sent to trustees concerning school law.
 Lutz: Inspection of Lutz and Tucker rural schools; letter sent to school trustees regarding sanitary condition.
 San Antonio: Sanitary inspection of town; compliance with screening laws ordered where violation of law found.
 St. Leo School: Inspection of school; talk given to children.
 Dade City: Sanitary inspection of town; conference with mayor; stores inspected, and health conditions investigated.
 Zephyrhills: Inspection of school; letter written to trustee concerning school law. Talk given to children.
 Plant City: Sanitary inspection of town; stores inspected and health conditions investigated.
 Dover: Sanitary inspection of town; school inspected; copy of school sanitary law sent to trustees.
 Seffner: Sanitary inspection; health conditions investigated and stores inspected.

WESTERN DISTRICT

- Pensacola: Routine work, office of Assistant to the State Health Officer. Management of communicable diseases and supervision of inspections of sanitary partolman as follows: Screening Law—restaurants 3, lunch counters, 4, kitchens 4, meat shops 1, butcher shops 1, grocery stores 5, bakeries 2, fruit stands 6. Surface Closet Law—private residences 9. Abatements ordered where violations found. Communicable Diseases—typhoid fever 4, tuberculosis 4, diphtheria 5; fumigations, releases, etc. 3.
 Bonifay: Sanitary inspection; interview with officials regarding vital statistics.
 Vernon: Interview with officials regarding vital statistics.
 DeFuniak Springs: Sanitary inspection; interview with officials regarding vital statistics.
 Milton: Sanitary inspection; interview with officials regarding vital statistics.

SOUTH EAST COAST DISTRICT

- Key West: Routine work, office of Assistant to the State Health Officer. Routine laboratory work. Condition of city dump again taken up with city council and use of incinerator recommended. Inspection of dairies in company with agent of U. S. Bureau of Animal Industry.
 Homestead: Conference with mayor and sanitary officials relative to enforcement of toilet and other sanitary ordinances.

Dania: Sanitary inspection of city.

Ft. Lauderdale: Sanitary inspection and conference with mayor and City Health Officer relative to sanitary condition.

Hallandale: Inspection of school, and assistance in taking cultures for suspected diphtheria carrier.

Pompano: Sanitary inspection of city.

Delray: Sanitary inspection and conference with City Clerk relative to sanitary conditions and registration of all births and deaths.

West Palm Beach: Conference with City Health Officer relative to sanitary conditions.

Lake Worth: Inspection of city and conference with City Clerk relative to registration of births and deaths, and with editor of newspaper relative to general sanitary conditions.

Florida City: Conference with mayor relative to sanitary conditions; sanitary inspection of city.

SOUTH CENTRAL DISTRICT

Plant City: Routine work, office of Assistant to the State Health Officer. Investigation of milk supply. Visit case scarlet fever. Conferences on health matters.

Tampa: Investigation at request of State Health Officer; interview with county physician.

Kissimmee: Investigation reported cases diphtheria. All physicians of town interviewed; conference with principals of schools. Inspection of throats of 108 colored children and talk to them on the prevention of this disease.

Bartow: Inspection of food stalls for enforcement of screening law.

Mulberry: Investigation of enforcement of screening law.

Ft. Meade: Inspection of town with Engineer. Conference with doctors and citizens.

Bowling Green: Investigation of enforcement of screening laws and inspection of open toilets. Talk with the mayor.

Wauchula: In company with sanitary engineer of the State Board of Health on survey and tour of inspection of the town; conference with city attorney regarding drafting of health ordinances; conference with doctors and city officials.

Arcadia: Investigation of reported nuisance; conference with mayor, physicians and citizens on health matters.

Punta Gorda: Talks with mayor, physicians and citizens; inspection of places handling foods.

Kissimmee: Conference with officials on drafting of suitable health ordinances. Investigation diphtheria situation with doctors.

Kissimmee Park, Finney Point: Investigation of alleged insanitary condition of school building and prevalence of typhoid fever in community.

St. Cloud: Conference with City Health Officer and inspection of town.

Orlando: Investigation of enforcement of health laws and conference with City Health Officer.

Sanford: Inspection of all fruit stands and food stalls in town. Conference with City Health Officer.

Sebring: Sanitary inspection of town; talk with health officer and citizens.

Frostproof: Sanitary inspection of town. Investigation of suspected case of pellagra. Talks with citizens.

Haines City: Sanitary inspection; talks with doctor and citizens.

Dundee: Sanitary inspection.

Winter Haven: Conference with mayor and inspection of town.

Lake Alfred: Sanitary inspection.

Auburndale: Conference with Mayor and inspection of town.

Lakeland: Conference with city health officer, public health nurse; inspection of town.

CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer. Consultation with attending physician eruptive disease; diagnosed measles.

Center Hill: Investigation outbreak diphtheria.

Hernando: Investigation case diphtheria in teacher in primary school.

Crystal River: Collection of specimen of water for bacteriological examination. Sanitary inspection of town.

Bronson: Inspection of closet of county court house; recommendations made for putting in sanitary condition.

Archer: Sanitary inspection of town.

Gainesville: Sanitary inspection.

Dunnellon: Consultation with attending physician regarding disease in children; diagnosis of Acedosis made.

NORTH CENTRAL DISTRICT

Live Oak: Routine work, office of Assistant to the State Health Officer. Establishing new office, and meeting people of Live Oak and vicinity. Microscopical work for local physicians.

Perry: Monthly inspection tour; investigation with Sanitary Engineer of State Board of Health sewage disposal in Perry. Meeting with city council.

Falmouth, Lee, Ellaville, Madison, Greenville, Aucilla and Monticello: Monthly inspection tour.

Lake City: Monthly inspection tour.

Hampton Springs: Collection of sample of water for bacterial examination.

Jasper and White Springs: Monthly inspection tour.

Lower end of Columbia County: Investigating typhoid. Source of outbreak determined. Talks to citizens.

Mayo and Dowling Park: Monthly inspection tour.

NORTH EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer. Talk before ladies of St. Augustine School Auxiliary on "Examination of School Children With Special Reference to Adenoids and Tonsils." Talk before nurses of Flagler and East Coast Hospitals on Bacteriology and Preventive Medicine.

Palatka and Barberville: Investigation outbreak of scarlet fever.

Favorita: Investigation outbreak of diphtheria. Assisting attending physician in administering diphtheria antitoxin.

Jacksonville, South Jacksonville, Pablo Beach, Mayport, Orange Park, Green Cove Springs: Monthly tour of inspection; conference with physicians and town officials; sanitary inspections. Better compliance sought of statute regulating construction of surface privies.

Fernandina, Callahan, Hilliard, Baldwin: Monthly inspection trip; sanitary inspections; investigation regarding enforcement of screening laws.

WEST CENTRAL DISTRICT

Tallahassee: Routine work office of Assistant to the State Health Officer. Three notices to abate nuisances served. Treatment given six hookworm cases. Inspections for observance of screening laws. Assistance in management of diphtheria cases.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during October: none. Total number towns visited in 1916 to November 1..... 121

PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes," Vol. XI, No. 10, October, 1916, pp. 32.
 Press service bulletins to Florida newspapers: Oct. 4, "Florida Summers;"
 Oct. 11, "Sanitary Engineering;" Oct. 18, "Preventable Diseases;" Oct. 25,
 "Mind Your Own Business."

Publications out in October: Pub. 169, "Sterilization of Water," reprint
 from October, 1916, Health Notes, pp. 5.

DISTRIBUTION OF LITERATURE DURING OCTOBER

Mailed upon request and distributed in field.....	3,242
Press service bulletins to Florida newspapers.....	1,100
Health Notes, October, mailing list.....	10,300
Total number pieces distributed.....	14,642
Number pieces literature distributed Jan. 1 to Nov. 1, 1916.....	166,480

SMALLPOX

Reported cases of smallpox in Florida, October, 1916.....none
 Total number cases reported in 1916 to November 1.....87

DISTRICT TUBERCULOSIS NURSE INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, Month Ended October 31, 1916

<i>Residence of Cases Visited to Date by Districts</i>	<i>Total Number of Cases Under Instruction Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Cases in Districts Under Instruction to Date</i>	<i>Total Number of Cases Following Instruction</i>
District No. 1.....	81	1	4	..	..	78	49
District No. 2.....	44	8	4	..	..	48	25
District No. 3.....	147	16	3	4	4	153	97
District No. 4.....	78	5	3	2	2	75	64
District No. 5.....	153	5	4	1	1	152	98
District No. 6.....	207	17	6	7	2	209	163
District No. 7.....	42	31	5	4	2	64	64
District No. 8.....	111	21	3	3	6	120	62
District No. 9.....	151	..	..	..	..	151	151
District No. 10.....	150	16	7	22	..	137	84
District No. 11.....	96	15	4	3	1	103	71
District No. 12.....	140	17	10	4	3	140	140
Colored Cases visited by colored nurse State at large	92	33	3	3	4	115	98
Total for State	1,492	185	56	53	25	1,545	1,166

BIOLOGICAL PRODUCTS

Distribution of Biological Products during October (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only). Number of persons receiving treatment:

<i>County and Town</i>	<i>Anti-Smallpox Vaccine</i>	<i>Anti-Rabic Vaccine</i>	<i>Anti-Typhoid Vaccine</i>	<i>Diphtheria Antitoxin Curative and Immunizing</i>	<i>Tetanus Antitoxin Immunizing</i>
BAY					
St. Andrew.....	10	..	..	..	..
COLUMBIA					
Lake City .....	..	..	2	..	..
DUVAL					
Jacksonville .....	..	1	1	51	1
South Jacksonville	20	..	..	..	..
ESCAMBIA					
Pensacola .....	..	..	7	5	..
GADSDEN					
Chattahoochee	50	..	..	..	..
HILLSBOROUGH					
Tampa .....	..	..	..	3	..
LEVY					
Bronson .....	..	1	..	..	..
Williston .....	..	..	..	2	..
MONROE					
Key West .....	..	..	..	1	1
PALM BEACH					
Stuart	10	..	..	..	..
POLK					
Bartow .....	..	..	..	3	..
Fort Meade .....	..	..	..	2	..
Lakeland .....	..	..	5	..	..
ST. JOHNS					
St. Augustine	100	..	..	..	..
SEMINOLE					
Chuluota	20	..	..	..	..
SUMTER					
Wildwood .....	..	..	10	..	..
VOLUSIA					
New Smyrna	50	.. *	..	..	..
Total.....	260	2	25	67	2
Total number persons receiving anti-smallpox vaccine in 1916 to November 1.....	5,087				
Total number persons receiving Pasteur treatment in 1916 to November 1.....	46				
Total number persons receiving anti-typhoid vaccine in 1916 to November 1.....	818				
Total number persons receiving antitoxin in 1916 to November 1.....	229				
Total number persons receiving tetanus antitoxin in 1916 to November 1.....	18				

CRIPPLED CHILDREN

NAMES	In St. Luke's	In Brewster (Col.)	Outside Treatment	Applications Received	Admitted St. Luke's	Admitted Brewster	Admitted for Office Treatment	Examined, not Admitted	Total Cases During Month	Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment
H. M.	1	..	..	..	..	..	..	..	1	X-Ray Exam. 10-31	.....	Tb. Ilium and Sacrum.....	1
F. P.	1	..	..	..	..	..	..	..	1	..	.....	Tb. Hip.....	1
I. P.	1	..	..	..	..	..	..	..	1	Appliance to correct contracture of knee	.....	Osteomyelitis Tibia.....	1
A. T.	1	..	..	..	..	..	..	..	1	X-Ray Exam. 10-17	.....	Chronic Osteomyelitis Tibia..	1
R. W.	1	..	..	..	..	..	..	..	1	Tenotomy of flexors of knees	.....	Poliomyelitis ...	1
G. G.	..	..	..	10	..	..	..	..	1	Astragalectomy, left foot	.....	Lt. Club Foot...	1
	-2	..	..	..	..	..	..	..	1	..	.....	..	..
Total	5	0	0	2	1	0	0	0	6	5	0	..	6

BACTERIOLOGICAL LABORATORIES

SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Tallahassee	Total
Animal Parasites.....	203	61	22	..	8	15	309
Diphtheria	1,213	65	51	2	48	46	1,425
Gonorrhoea	72	61	34	1	11	5	184
Malaria	180	151	62	2	18	56	469
Pathological Spec.....	..	6	..	..	17	..	23
Rabies	5	..	1	..	..	..	6
Tuberculosis	111	65	23	1	24	16	240
Typhoid	187	89	68	1	16	38	399
Water: Bacterial Ex....	72	4	5	..	18	..	99
Wassermann	301	82	..	..	..	..	383
Miscellaneous	42	36	21	6	53	41	199
	2,386	620	287	13	213	217	3,736

Total number of specimens examined by the Laboratories of the State Board of Health of Florida, during October, 1916.....3,736

DISEASES DETERMINED BY BACTERIOLOGICAL LABORATORIES
OCTOBER, 1916

(MALARIA)

TOWN	Diphtheria	Gonorrhoea	Estivoautumnal	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ameba	Ascariis	Trichinosis	Oxyuris	Tapeworm	Rabies	Wassermann
Alton							1	1								
Arcadia	1	1														
Bartow	1								2							
Bascom		1				1										
Blitchton					1											
Bonifay								1								
Bowling Green								2								
Bradentown								1								
Brooker								2								
Buena Vista								1								
Bunnell	1	1														
Campville								2								
Carrabelle						1										
Center Hill	1	1						2								
Century							1									
Chattahoochee																9
Chieffland						1	1									
Chipley								1								
Chuluota		1														
Citra								1								
Clearwater		1				1										
Cocoa	1															
Cypress								1								
Daytona	1						1									
DeLand								5	1							
Delray	1															
Dowling Park							1									
Dunnellon								1								
Eau Gallie								1								
Eustis								1								
Favoretta	2															
Ft. Lauderdale	5															
Ft. Pierce	1													1		
Ft. Meade								1								
Gainesville	4	1							4							
" Released Cult.	4															
Grandin						1										
Goulding								1								
Gullpoint						1										
Hallandale	3															
Hastings								1								
Hernando	1							1								
Jacksonville	61	20			2	1	9	13	21		4	2	1	2		83
" Released Cult.	92															
Jasper								1								
Key West	1	1						1								1
Kissimmee	5															1
Lake Butler							1									
Lakeland								1								
Laurel Hill					4		1									
Leesburg	1							1								
" Release Cult.	2															
Live Oak	1	1							1							
" Release Cult.	2															
Lulu								1								
Madison								1								
Manatee								1								
Mandarin								1								
Mayo								1								
McDavid							5									
Melbourne						1		1								
Miami	1	6			1	2	1	1								1
Milton								1								
Monticello								1								
New Smyrna								1	1							
Ocala								2								
Okeechobee									1							
Orlando								2	2							1
Oxford								1								

MALARIA

TOWN	Diphtheria	Gonorrhea	Eitvocolummal	Quarant	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ameba	Ascaris	Trichurias	Oxyuris	Tapeworm	Rabies	Wassermann
Palatka	1	1	..	..	..	..	..	..	..
Palmetto	1	..	..	..	..	..	..	..	..
Pensacola	14	15	1	..	2	1	3	8	6	..	..	..	..	..	..	1
Perry	2	..	..	..	..	..	..	..
Plant City	1	..	..	1	..	..	..	..	..	..	..	1	..	1
Pine Barren	1	..	..	..	..	..	..	..	..
Putnam Hall	1	..	..	..	..	..	..	..	..
Ritta	1	..	..	..	..	..	..	..	..
River Junction	1	..	..	..	..	..	..	..	..
St. Augustine	1	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..
St. Petersburg	1	..	..	..	..	..	..	..
San Antonio	1	..	..	..
Sanderson
Sanford	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..
Sneads	1	..	..	1	..	..	..	..	..
Starke	1	..	..	..	..	..	3	..	..	..	..	..	..	..
Tallahassee	7	2	..	..	2	5	1	1	2	..	1	..	..	..	..	..
Tampa	4	13	..	..	1	5	5	3	5	1	4	4	..	..	..	4
West Tampa	1	..	..	..	..	1	..	..	..	..	..	..	..	..	1
Tarpon Springs
Titusville	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wauchula	1	..	..	..	..	..	..	..	..
Wellborn
Wekiva	5	..	..	..	1	..	..	..
West Palm Beach	1	..	..	1	..	..	..	..	..	..	..	..
Wewahitchka	1	..	..	..	..	..	..	..	..
Williston	1	..
Winter Haven	1	..	..	..	..	..	..	..	..	..
Worthington	1	..	1	..	..	..	..	..	..	..
Zolfo	1	..	..	..	..	..	..	..	..
Total	220	66	5	..	13	21	37	59	95	1	10	6	2	5	1	103

BUREAU OF VETERINARY SCIENCE

TICK ERADICATION

Cattle dipping vats reported constructed during October, 1916:

Clay County.....	1
Alachua County.....	1
Total number of vats reported constructed to November 1, 1916.....	122

GLANDERS

Diagnosed by Veterinary during October, 1916:

Hudson, Hillsborough County.....	1 horse, \$50.00
Jacksonville, Duval County.....	1 horse, 75.00

IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 220; mules, 1,310; cattle, 757; hogs, 32; dogs, 2.....2,321

EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 33;; mules, 47; cattle, 2,844; hogs, 298.....3,222

INTRASTATE SHIPMENTS OF LIVE STOCK TO DADE COUNTY

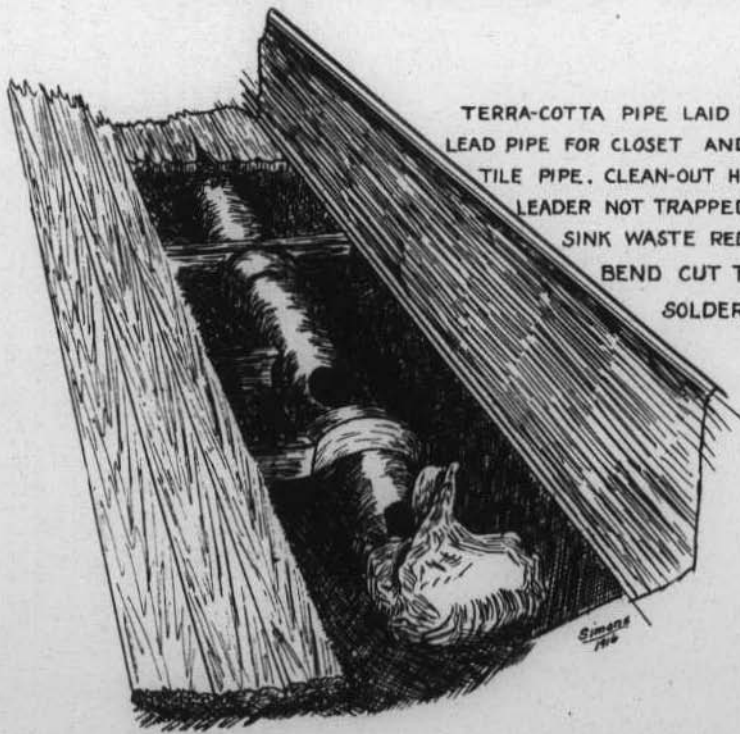
Cattle.....11

VETERINARY INSPECTIONS FOR THE MONTH OF OCTOBER

October 1, Arcadia, dipping cattle; October 4-5, Grand Ridge, making cattle dip; October 4-5, Gainesville, addresses; October 5, Raiford, post mortem on a "Jack"; October 7, Lemon City, dipping cattle; October 7, Jacksonville, consultation at office; October 10-11, Bronson, investigation and test for glanders, negative; October 12-13, Grand Ridge, making dip; October 12-15, Hudson, investigation and test for glanders, positive; October 16, Florida City, spraying cattle; October 18, Modello, inspection of stable manure; October 19, Jacksonville, address at the Armour Packing Company's opening; October 21, Lemon City, dipping cattle; October 24, South Jacksonville, investigate takosis in goats; October 24, Miami, inspection of quarantined premises; October 26, Jacksonville, investigate disease in bull; October 26, Jacksonville, testing dip; October 30, Arch Creek, inspection of stable manure; 27 days were spent in educational tick eradication work and vat construction in Escambia County.

A REASON WHY FLORIDA NEEDS A STATE PLUMBING CODE

FROM A PHOTOGRAPH OF AN
ACTUAL INSTALLATION IN A
GROWING FLORIDA CITY.



TERRA-COTTA PIPE LAID INSIDE OF BUILDING.
LEAD PIPE FOR CLOSET AND SINK CEMENTED INTO
TILE PIPE. CLEAN-OUT HOLES NOT COVERED, RAIN WATER
LEADER NOT TRAPPED. FIXTURES NOT REVENTED.
SINK WASTE REDUCED FROM $1\frac{1}{2}$ " TO $1\frac{1}{4}$ ". LEAD
BEND CUT TO FORM BEND BUT CUT NOT
SOLDERED. LEAD PIPE EATEN BY RATS.



HEALTH NOTES

OFFICIAL BULLETIN

PUBLISHED MONTHLY BY THE

STATE BOARD OF HEALTH

ENTERED AS SECOND CLASS MATTER, FEBRUARY 17, 1915

AT THE POSTOFFICE AT JACKSONVILLE, FLORIDA, UNDER THE ACT OF JULY 16, 1894

Vol. XI December, 1916 No. 12 (New Series)

HON. FRANK J. FEARNESIDE, President
Palatka, Fla.

HON. S. R. MALLORY KENNEDY, M. D.
Pensacola, Fla.

HON. C. G. MEMMINGER
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EDITED BY
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Jacksonville

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Jacksonville

BRANCH LABORATORIES

Tampa Pensacola Miami
Tallahassee Key West

This Bulletin will be sent to any address in the State free of charge.

In case of outbreaks of smallpox, typhoid fever, diphtheria, scarlet fever, or any contagious disease, report to the State Health Officer, Jacksonville, and, if necessary, a medical officer will be detailed to take charge.

If you wish to know how to avoid tuberculosis, typhoid fever, malaria, hookworm, smallpox, diphtheria, etc., address the State Health Officer, Jacksonville.

If you think you have tuberculosis, typhoid fever, malaria, hookworm, or diphtheria, have your doctor take a specimen and send to one of the State Board of Health laboratories for examination.

Anything you want to know about sanitation and public health the Executive Office will try to tell you.

Should you have contagious diseases among your live stock, write to the State Health Officer for advice and help.

Geddings, Dr. H. D.,
U.S.M.H. Serv. Per.

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23"
- Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30"
- Publication 77, The House Fly, Second Edition, May, 1914, pp. 11.
- Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
- Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
- Poster 90, Smallpox Vaccination, April, 1912, 18"x24"
- Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
- Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
- Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
- Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
- Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
- Publication 105, Malaria, April, 1913, pp. 8.
- Publication 106, Mosquitoes, May, 1913, pp. 16.
- Publication 108, Diphtheria, March, 1914, pp. 4.
- Publication 109, Measles, March, 1914, pp. 4.
- Publication 110, Scarlet Fever, March, 1914, pp. 4.
- Publication 111, Smallpox, March, 1914, pp. 4.
- Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
- Publication 117, Imhoff Tanks, May, 1914, pp. 6.
- Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
- Publication 119, Consumption Leaflet, June, 1914.
- Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
- Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
- Publication 123, Smallpox, December, 1914, illustrated, pp. 44.
- Publication 124, The House Fly, Carrier of Disease, December, 1914, illustrated, pp. 16.
- Publication 125, Baby Welfare, December, 1914, illustrated, pp. 17.
- Publication 126, Typhoid Fever, December, 1914, illustrated, pp. 23.
- Publication 127, Hookworm Disease, December, 1914, illustrated, pp. 30.
- Publication 128, Pure Water, December, 1914, illustrated, pp. 21.
- Publication 129, Tuberculosis, Its Cause, Prevention and Treatment, December, 1914, illustrated, pp. 18.
- Poster 130, Hookworm, December, 1914, 12"x25"
- Publication 131, The Serum Treatment of Hog Cholera by the "Single" and "Double" Methods, December, 1914, pp. 13.
- Poster 132, The Barn That Jack Built, Sanitary Poster, December, 1914, 15"x25"
- Publication 133, General Sanitary Management, December, 1914.
- Publication 134, Twenty-sixth Annual Report of the State Board of Health of Florida, 1914, pp. 247.
- Publication 135, Hookworms in Dogs, pp. 4, Reprint from Vol. IX, No. 10, October, 1914, Health Notes.
- Poster 136, Rats, 11"x20"
- Publication 139, Notice of Quarantine, Dade County, May, 1915, pp. 4.
- Publication 140, Rules and Regulations, Cattle Tick Eradication, Florida, May, 1915, pp. 6.
- Publication 141, Hookworm, leaflet, June, 1915.
- Publication 142, A Few Remarks on Preventive Medicine, July, 1915, pp. 16.
- Publication 143, Flies, July, 1915, pp. 4.
- Publication 144, Chemical Treatment of Water, July, 1915, pp. 7.
- Publication 145, Typhoid, July, 1915, leaflet.
- Publication 146, Pellagra, July, 1915, leaflet.
- Publication 147, The Sanitary Privy, July, 1915, leaflet.
- Publication 148, Whooping Cough, July, 1915, leaflet.
- Publication 149, Flies, July, 1915, leaflet.
- Publication 150, Malaria, July, 1915, leaflet.
- Publication 151, Measles, August, 1915, pp. 18.
- Publication 152, Save the Babies, October, 1915, pp. 19.
- Publication 153, Home Sanitation, January, 1915, pp. 20.
- Publication 155, Demonstration Train of the State Board of Health, January, 1915, folder.
- Publication 157, How to Test Cattle for Tuberculosis, April, 1916, pp. 8.
- Publication 158, Malaria, April, 1916, pp. 4.
- Publication 159, Some Poultry Pests, April, 1916, pp. 10.
- Publication 160, Annual Report State Board of Health of Florida, April, 1916, pp. 256.
- Publication 161, A Model Sewage Disposal Plant for a Rural Dwelling, Reprint Vol. XI, No. 3, March, 1916 Health Notes, pp. 6 (illustrated).
- Publication 162, Tick Eradication, Reprint Vol. XI, No. 3, March, 1916, Health Notes, pp. 14.
- Publication 163, Hog Cholera, pp. 30.
- Publication 164, Annual Report of Veterinary Department, 1915, Reprint from 27th Annual Report of the State Board of Health, April, 1916, pp. 56.
- Publication 165, Annual Report of Crippled Children Treatment, 1915, Reprint from 27th Annual Report State Board of Health, April, 1916, pp. 6, illustrated.
- Publication 166, Vital Statistics, 1915, Reprint from June, 1916, Health Notes, pp. 44.
- Publication 167, What You Should Know About Tuberculosis, Aug., 1916, pp. 32.
- Publication 168, "A Health Sermon," Reprint from June, 1916, Health Notes, pp. 6.
- Publication 169, "Sterilization of Water," Reprint from Oct. 1916, Health Notes, pp. 5.

PLAIN COMMON SENSE

Dog fanciers have long noted that when a house dog begins to get fat and wheezy it is pretty apt to be attacked by a stubborn skin disease. In such a case they cut down the diet and increase the open air exercise, thus relieving the over-burdened body of poisonous substances.

The sin of gluttony is common and therefore much condoned, but like every other violation of Nature's laws has a penalty. Fat inefficiency, sluggish mentality, the reddened nose, the pimpled face, certain of the chronic skin eruptions, and much fatigue and nervousness are due to the abuse of the digestive apparatus. Rich, indigestible foods in large quantities, highly seasoned to stimulate the jaded palate, are forced into a body already rebellious from repletion. Exercise is largely limited to walking to and from the table and bodily deterioration proceeds rapidly. Many an overfed dyspeptic, suddenly dragged by the stern hand of circumstance from a life of physical ease and plenty and forced to work out of doors suddenly discovers that his semi invalidism has gone, that a chronic skin derangement of many years standing has disappeared and that a new vigor and zest of life has been given him.

Not everyone can spend his whole time in the open air but a certain amount of exercise and plain wholesome food in an amount not exceeding the body's needs can be had by almost everyone. Simple moderate diet and exercise make for health. These are not faddish food theories: they are just plain common sense.

GOING IN DEBT

Everyone appreciates the danger of "going in debt." We spend much time teaching our children how debts, once started, rapidly accumulate. One of the first principles of business instilled into every boy and girl is the necessity of living within his or her income.

Life is much of a business proposition. We have a certain amount of energy to expend. Our bodies can stand just a certain amount of work. Whenever we overwork our bodies or expend more energy than the allotted amount, we go into debt to nature and nature's banker never fails to collect. We cannot "borrow years" and not pay them back. The body requires a certain amount of rest. If this amount of rest is not received we "borrow years" from nature's banker. The body requires a certain amount of food and fuel. If the proper amount is not provided we "borrow years" from nature's banker. The engine fireman knows that over-firing of an engine is as detrimental to results as is under-firing. So with our bodies. Over eating is as detrimental as under eating. When we over eat or eat improper foods we endanger the body and thus "borrow years" from nature's banker.

Don't go in debt to nature. You cannot escape nature's debts by going into voluntary bankruptcy. Her bills must be paid.—*Press Bulletin, Washington State Board of Health.*

It is in the succeeding generations that health workers hope to see marked improvement in the public health, and lower death rates, brought about by familiarizing the children, the men and women of the future, with the nature and prevention of communicable diseases. The following essay on "Tuberculosis, Its Cause, Prevention and Treatment," written by Charlie Frank Scruggs an eleven-year-old pupil of the Miccosukee school, was the prize-winner in a contest conducted by Mrs. Lydia L. Kirk, District Public Health Nurse of the State Board of Health, and shows a remarkable grasp of the subject for a child of his years; and should he, in later years, be confronted with this great scourge of the human race, he will be well prepared to combat it:

TUBERCULOSIS, ITS CAUSE, PREVENTION AND TREATMENT

Probably from the earliest times, mankind has been afflicted with tuberculosis. A Greek physician named Hipocrates wrote an essay on consumption in 400 B. C., and in the lungs of Egyptian mummies the marks of consumption have been found. At the present time bacillus tuberculosis, or the tubercle bacillus, as it is sometimes called, is the most deadly of all the bacterial enemies of man. In our own country more than one-tenth of all the deaths are caused by this germ, which means the "captain of the men of death is killing our fellow-countrymen at the rate of 150,000 a year." It is called the "Great White Plague," and richly deserves its name.

The germ of tuberculosis is like a mold or fungus and will not grow outside the body. It is a slow-growing bacterium but is a hardy one, and often it resists all attempts of the body and grows steadily on until it causes death. It has the nature of a plant. It dies soon in light and air when dry. Moist heat 145 degrees F. will kill it, also alkaline soaps or washing soda, yet in a dark, damp house the germs, in the sputum of consumptives live for months or years, away from the habitations of men and animals.

The tubercle bacillus is not found, but is often present in the earth and dust about places where cattle are kept, and in dust in the rooms of careless consumptives. The tubercle bacillus may grow in almost any part of the body and cause tuberculosis of the part attacked. Tuberculosis or consumption is the best known form of the disease and causes by far the most deaths. Tuberculosis of the bones is also a common trouble. The skin, kidneys, intestine, larynx and other parts of the body also may be attacked by this germ, and when the tubercle bacillus is growing anywhere in the body, it is always possible for it to have been carried by the blood to the lungs.

It is not possible in most cases of tuberculosis to tell how the germ gets into the body. Many cases come from breathing in germs from dust, dried sputum, and droplets that have been coughed out by consumptives, and other cases from germs that have been swallowed and have passed through the walls of the intestine into the blood. It can also enter the body through cuts and scratches. The old belief that consumption was inherited rested on ignorance of its cause. It can be inherited in few instances, but these are fatal after birth. The tubercle

bacilli are often found in the milk. Tuberculosis may begin at any age and it is possible for the strongest as well as the weakest to develop tuberculosis. Bad habits, intemperance, vice, reckless living, exposure or over strain may break down the strongest when the bacilli once get in. A careless consumptive is dangerous, but a careful consumptive is not to be feared. Precautions that should be taken by the person who has the disease:

Burn the sputum or spit in cuspidors with disinfectant. The simplest and best way is to spit into paper cuspidors or cloths to be burned. Spitting on sidewalks or in corridors of buildings is dangerous because it can be easily carried on shoes and skirts. Paper handkerchiefs are most useful. If washable handkerchiefs are used they should be boiled before using to kill germs. Coughing spreads the disease. Try to avoid it. When coughing always cover the mouth. Turn head away from other persons when coughing, sneezing and clearing the throat. Keep children away from parents or others who cough and spit. A person with tuberculosis should sleep alone, have his own dishes and these should never be washed with other dishes, nor allowed to come in contact with them until after being boiled for at least five minutes. Bed clothing, clothing and furniture ought to be disinfected occasionally and exposed to the sunshine as much as possible. All clothing should be boiled before being washed with other clothes. The steady manner in which consumption runs on has caused many persons to think it is an incurable disease. This is a great mistake. If consumptives are taken in hand before the germs have gained a secure foothold it yields to treatment of consumption. Everything depends on beginning in the early stages of the diseases. The most important factors in the treatment of consumption are as follows:

Rest, if a consumptive can be kept quiet much of the time, toxin that is produced by the germs will be thrown off in the sputum. Anything that causes the breathing to be quickened causes more toxin to be carried from the lungs through the body and increases the fever. When there is no fever a little exercise may be taken, but it should be taken with care.

Food. A consumptive should have an abundance of nourishing food. Meat, eggs, milk and other foods that can be eaten and digested. Out of door life. Nothing in the treatment of consumption is more important than fresh air. Sleep in the open air winter and summer. In sleeping out doors in winter it is necessary to have clothing and to wear a hood to protect the head and neck and in many places in summer it is necessary to screen the patient from flies and mosquitoes. A cold dry climate is best for consumptives. Many states have established sanatoriums to which consumptives can go, and at a slight expense remain until they recover from the disease.

This is sensible like for in a sanatorium a consumptive can have proper food and care. And in them there is no danger of the spread of the disease.

Health Briefs

DO YOU KNOW THAT

Open air exercise cures colds? _____

Flyless town has few funerals? _____

Bodily vigor protects against colds? _____

Overheated, air tight rooms beget colds? _____

It's worry, not work, which shortens life? _____

Neglected colds often forerun pneumonia? _____

A little cough often ends in a large coffin? _____

Careless sneezing, coughing, spitting spread colds? _____

Pneumoia kills over 120,000 Americans each year? _____

The well that drains the cesspools is the cup of death? _____

Persistent, oft repeated colds, indicate bodily weakness? _____

A cold bath every morning is the best complexion remedy? _____

Colds sometimes get well in spite of the excessive use of alcoholic beverages? _____

The U. S. Public Health Service has reduced malaria 60 per cent in some localities? _____

The death rate from typhoid fever in the United States has been cut in half since 1900? _____

TOO FREQUENTLY THE CASE

"Well, George," said the president of the company to old George, "how goes it?"

"Fair to middlin, sir," George answered. And he continued to currycomb a bay horse.

"Me an' this here hoss," George said, suddenly, "has worked for your firm sixteen years."

"Well, well," said the president, thinking a little guiltily of George's salary. "And I suppose you are both pretty highly valued, George, eh?"

"H'm," said George, "both of us was took sick last week, and they got a doctor for the hoss, but they just docked my pay."—*Home Companion*.

Sanitary Engineering Notes

THE NEED OF A STATE PLUMBING CODE

George W. Simons, Jr., Chief, Bureau of Engineering

In the act of making official sanitary inspection trips throughout the State of Florida I have seen and heard much concerning the business of plumbing, the methods of installations in vogue, the kinds and grades of construction material employed, and workmanship. From all sides, the absolute need for a set of official minimum rules and regulations governing plumbing work has been effectively conveyed. The matter has been so emphatically and vividly brought to attention in most every portion of the State that it was finally decided to devote considerable attention to the promulgation and study of various plumbing laws, rules and regulations with the ultimate idea in mind that a uniform and effective set of plumbing regulations would be the final result. In consequence, during the past two months a quantity of serviceable data has been collected, also consensus of public opinion has been crystalized until at this stage with all interested working in harmony and cooperation we may soon hope to see proposed to our legislature a law for the supervision of the business of plumbing, which in turn will specify a uniform minimum code for the guidance of those who install plumbing.

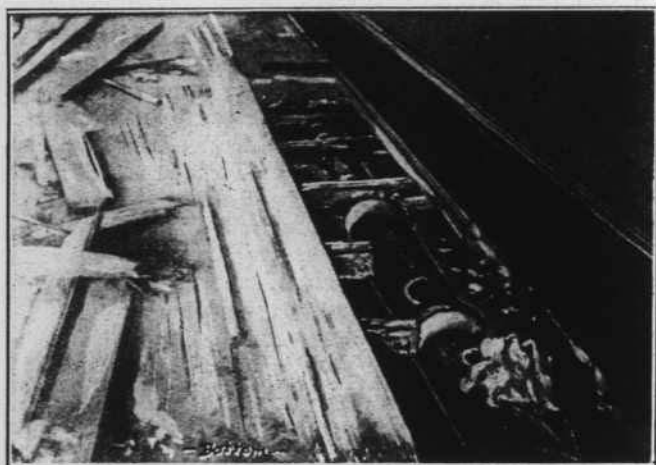
Primarily, what is a State plumbing code, and what are its essential functions? Briefly stated, a State Plumbing Code is a set of minimum rules, regulations and designs drawn up by representative plumbers known as a Board of Examiners of Plumbers, a Board specified in the State law, which set of rules, regulations and designs would supervise and keep in conformity all future plumbing work. It is a set of standards which can be utilized and adopted by all cities and towns in further compiling a municipal ordinance in conformity with the State Code, such an ordinance as would specify all materials of construction, methods of installation and provide for official inspection of such installations before same are allowed service.

Let us now note the existing need for the proper enforcement of the uniform code of rules regulating the business of plumbing. Viewing the State from a population standpoint, Florida is still in its infancy, but stands at the threshold of a steady substantial growth. It is one state which largely has been left untouched by the eager homeseeker until within recent years. Florida is rapidly growing, it is a state of immense territory comprised largely of small embryonic towns which at this time are attracting thousands of homeseekers. To show this great growth, glance at the following table taken from the 1910 Federal Census Reports. In the year 1910, 29.1 per cent of Florida's population resided in municipalities of larger than 2,500 people, while 70.9 per cent resided in towns of 2,500 or less. In 1900, 20.3 per cent of the people resided in municipalities of more than 2,500 people and 79.7 per cent resided in towns of less than 2,500 people, thus it is evident that from 1900 to 1910 there was a decrease of 8.8 per cent in,

what the Federal Agents designate as rural territory, vice versa, there was a similar increase in urban population. It can thus be safely assumed that this percentage increase occurred in the smaller towns, less than 2,500 people. These figures merely show that the rural districts of Florida are growing and that the number of small towns, classed as rural, by the Federal Census, are decreasing and the number of urban communities are increasing, moreover, the smaller towns are growing more rapidly than the larger ones. A trip down the East Coast of Florida, also through South Central Florida and the West Coast disclose to one that the small towns are receiving a substantial increase in population.

In small rapidly growing communities, subject to sudden or gradual "booms" there generally accompanies a gradual construction period during which many homes, store buildings and industrial establishments are built. All these new structures are as a rule fitted with plumbing fixtures, which in such growing communities are often times installed by incompetent persons designating themselves as plumbers, men who proceed to do inferior work, use inferior material with the idea in the end of reaping an excessive profit from one who is naturally suspected of being wealthy. To limit such unethical practices is the one great need for a State Plumbing Code.

The question now arises, are such practices common in Florida? South Central Florida has many small towns whose population is increasing by leaps. These new towns are locations for zealous real estate agents advocating home sites in their specially promoted subdivisions. To make the sub-divisions seem more metropolitan and attractive, the agent proceeds to install water and sewerage systems in order that each householder may take advantage of modern plumbing conveniences. In many instances the promoter builds the houses, equipping same with plumbing systems which connect with his sewers. The main idea of the real estate agent is the promotion and realization



of an enormous profit, using grossly inferior plumbing installations as a means to his end. In one city on the East Coast of Florida such a sub-division was laid out, in which house drains were laid on the surface of the ground, improperly jointed and leaky. The sub-division promoter paid absolutely no attention to the plumbing or sewerage which was installed before the adoption of the present local plumbing ordinance governing such work. As a consequence a deplorable condition exists, leaky house drains laid on the surface of the ground flood the surface every time a house fixture is flushed with the ultimate result that pools of raw sewage are found adjacent to the house. Accompanying is a photograph showing a piece of plumbing installed in the same town previous to the adoption and enforcement of the present local city code.

This photograph shows a terra cotta pipe laid inside of a building, lead pipe used for the closet and such, cemented into a tile pipe with cleanout holes not covered. The rain leader, moreover, is not trapped, fixtures are not vented, sink waste pipe reduced from $1\frac{1}{2}$ to $1\frac{1}{4}$ inches, lead bend is cut to form bend, but cut is not soldered, further the lead pipe is eaten by rats. The plumbing inspector of this city, in a recent letter writes as follows:

"The need of a State Plumbing Code is daily impressed on my mind for several reasons.

"To free a City Plumbing Inspector's work from local prejudice and interference. To give prestige and force to the enforcement of a plumbing code by means of the County and State courts, and by providing a means by which correct plumbing and sewage principles can be insisted on in places where not covered by a City Plumbing Code.

"To illustrate in a few words the benefit of such a code: If the plumbing and sewage system of the city of——— installed prior to the adoption of a City Plumbing Code, had been executed in accordance with the requirements of the State Code, the individual and the City would not, at present, be confronted with the necessity of spending thousands of dollars in replacing unsanitary installations.

"By applying a few simple principles of ventilation and engineering, this money would have been saved to the public.

"The most common defects in plumbing and relative to plumbing, I find are makeshift and unsanitary plumbing fixtures and drainage system, inadequate water supply, absence of water control valves, careless unskilled and dangerous installation of plumbing and sewers. The digging and maintenance of cesspools, lack of ventilation and proper construction material used for public and semi-public toilet rooms, absence of plumbing in places where same could be easily installed, non-treatment and disposal of private and public sewage, lack of sterilizing medium for swimming pools."

The City Engineer of another Florida city on the East Coast expresses himself as follows, feeling that the architects should be taught more in regard to plumbing construction:

"One thing I think would help quite a little in establishing a code would be to have the architects make provision in the plans they draw for an easy and sanitary installation of the necessary plumbing.

"I have found on several instances where the architect or the

contractor has made absolutely no provision whatever and it was necessary for the plumber to install the plumbing as best he could.

"If it were possible to have the proper provision made in the plans and specifications it would, in my mind, make quite a difference in the cost of installing sanitary plumbing."

From West Florida comes the following opinion from a plumbing inspector:

"Now for a few pieces of work that have come before me in the town of———, first that comes to my mind is in the case of——— residence, bath in second story over kitchen, closet on outside wall with stack inside wall, this stack stopped within two feet of an open window and came down to within eight inches of the bottom sill, two joints of 6 inch stove pipe were unlocked and telescoped, seams opposite, placed over the stack and the bottom end closed so as to enter a 6 inch stove pipe elbow, another elbow connected on to that and turned down into a brick grease trap built under a shed room on rear of kitchen and the entire trap closed over and cemented.

"Another was in the residence of——— who at the time was cashier of the——— Bank, a lavatory in his bed room within five feet of his bed, same connected to sewage well with no trap of any kind.

"Another case of five houses on one line of 8 inch T. C. Sewer Pipe, with fixtures set in each house and nothing but a straight pipe stuck down through floor to this sewer which was laid in line under each house, no traps to any.

"Innumerable cases where a milk can is stuck in the hub and cemented around in place of proper clean out plug.

"Now all this work was done by men who knew better but with sharp competition, a greed for money, no laws governing and the ignorance, and stinginess of the people, they could expect no better and really should not have it but I cannot help thinking of the little children who have to live in these houses and breathe bad air. They are innocent and know no better and if they did, they could do nothing; they are helpless, and I think some laws governing these matters and that will whip Mr. Stingy Mossback into line is the only and the proper thing to do.

"I am not in the business any more and never expect to be and may not be an inspector much longer, but I assure you that you have my heartiest good wishes for your success in securing or causing to be secured a State Plumbing Code, and a good tight one too."

Several States in the country have admirable plumbing laws and regulations supervising the business of plumbing. Recently I have conducted a country-wide survey and as a result found the following states with excellent codes in vogue: Wisconsin, Ohio, Louisiana, Massachusetts, District of Columbia. New York and Pennsylvania have rigid laws, specifying that municipalities draw up ordinances in conformity with the State law. Porto Rico and Hawaii Islands have excellent codes also. Several states, notably Illinois and Arkansas, are giving the matter their attention at this time.

Is the State Plumbing Code successful in states where same is in operation? This question can best be answered wherever the code

has been in actual operation. Mr. Frank R. King, of Wisconsin, State Plumbing Inspector has very kindly furnished my office with considerable valuable material from his files, as has also Mr. William C. Groeniger, State Plumbing Inspector of Ohio. The following quotation is from a recent letter received of Mr. King's:

"Permit us to say that the Wisconsin State Board of Health, on April 6th, 1914, adopted a state plumbing code. This code was adopted in accordance with the provisions found in Chapter 731, Laws of 1913, see page 5 of code. Chapter 674, on page 5, however, also grants power to the state board of health to adopt such a code.

"The code, as you will note, is applicable to any building in this state. It prescribes minimum standards which are, so far as is practicable uniform throughout the state. It gives the city the right to ordain by local ordinances, additional rules and regulations not inconsistent with the provisions of the state plumbing code. The provisions of our plumbing code meet with the approval of all concerned in this State. As a result, more economical efficient plumbing and drainage installations are apparent and the standards of the plumbers are materially elevated.

"You will note the law has two distinct features, viz: the licensing of plumbers, which applies to all cities in this state having a population of 5,000 or more, and the adoption and enforcement of a plumbing code. The licensing feature is not such that it could be recommended to other states as a model. The changes necessary however, are of a minor nature."

The following is from a recent communication received from Mr. Groeniger, of the Ohio State Board of Health:

"Six years ago there were 30 cities in this state that had plumbing regulations that were widely separated in their requirements and what was considered good practice in one city was considered bad in the other. At this writing we have approximately 40 cities in the state working under a minimum standard state plumbing code and the public itself is gradually coming to know what good plumbing is, which places the people in a position to demand it."

"The present organization of the division of plumbing inspection is composed of the director, two deputy inspectors, and a clerk. Our jurisdiction extends to all buildings other than residences, outside of municipalities wherein local officials are enforcing the provisions of the State Plumbing Code. We also act in an advisory capacity in cities where there are local plumbing inspectors and local plumbing codes.

"The inability of many architects to properly design plumbing systems, is in many instances responsible for additional labor and material and delay in building construction, and makes it advisable that architects, engineers, plumbers and owners, submit plans and specifications in duplicate for examination and approval prior to the letting of the contract or beginning the installation."

The above clearly shows the necessity for and the method of operation of a State wide law and code. The question of plumbing installations is strictly one that affects the public health of the people in the community. The plumbing of the house is the sewer system of that

house just as the sewerage is of a town. The primary feature of plumbing installations is to convey the waste matter from the house as quickly as possible without causing nuisances or undue trouble. The plumbing fixtures as the city sewers carry human excrement, urine and organic waste which should be conveyed in the properly designed pipes safely and properly jointed and trapped, as Mr. Groeniger has ably stated.

"The plumbing in buildings is not strictly a requirement affecting the safety of the structures, nor has it to do with the thickness of the walls, carrying weight or fire hazard, but it does directly affect the comfort, convenience and health of the occupants and the installation, supervision and inspection should be from a health and not a building construction standpoint."

WATER ANALYSES AND WHAT THEY MEAN

Samples of water are frequently sent to laboratories for analysis, and upon a report stating that analysis failed to show the presence of dangerous micro-organisms, the source of supply is pronounced as perfectly safe for domestic purposes. Such conclusions are frequently erroneous.

It must be remembered that in making a bacteriological examination of a sample of water it is customary to "plant" 10 cc, or about 150 drops. One can readily conceive that in selecting 150 drops of water from a stream and examining that 150 drops only, it is entirely possible that the presence of contaminating matter may escape detection.

The bacteriological analysis of a sample of water giving positive results is confirmatory evidence that pollution has taken place, and supports the indication that such contamination is liable to occur, as found by the sanitary survey of a water supply. It is not right or proper to say that a water supply is perfectly safe for domestic purposes until a thorough sanitary survey has been made. If sources of contamination are found as a result of such survey, the water should be kept under constant observation, bacteriological examinations being made at frequent intervals. With a source of contamination on a watershed the waters will ultimately become contaminated and proof of such contamination will ultimately be found by bacteriological examination.

As an illustration. We had samples of water sent us some two years ago from a well in this State. Near this well were several sources of contamination. Samples of water were sent in at frequent intervals. For eighteen months no evidence of pollution was found, but after eighteen months' watching the evidence of pollution showed up in the bacteriological examination and has been found in every sample examined during the last six months.

Again, pollution enters streams in an intermittent manner and does not become thoroughly mixed with all parts of a stream for a considerable distance. As a result, portions of a stream may show entire absence from pollution and other portions show highly polluted. Recently I had occasion to take samples of water from various points in a given stream, this stream having numerous sources of contamination on its

banks, all located at points above the place where the last sample was taken. Six samples were taken at points about 250 feet apart, starting at the lower end of the stream. Four of these samples showed evidence of pollution and two showed no evidence of pollution, and yet no part of the water in this stream was safe for human consumption.

To be of any value in determining the desirability of a water supply for domestic purposes, bacteriological examinations must be supported by sanitary survey, and sanitary surveys must be supported by bacteriological examinations.—*Press Service, Washington State Board of Health.*

THE SIGNIFICANCE OF A BACTERIAL EXAMINATION OF WATER

The bacterial analysis made applies only to the sample of water examined. If this sample has not been contaminated in taking, and has been received in the laboratory not later than twelve (12) hours after it was taken, having been properly iced during this period, the analysis will show the condition of the water from which the sample was taken, at the time of sampling.

A single bacterial analysis is of limited usefulness, as it will tell only of the condition of the water at the time of taking. Therefore, bacterial analyses must be made at different times and from these the sanitary qualities of the water supply may be more accurately determined.

During the month of December the water and sewage laboratory had a very busy month examining 75 samples of water and sewage, both bacterially and chemically. These samples were received from various stations located in diverse portions of the state and present valuable data relative to the quality of our water supplies. It is to be requested that more samples be submitted so that during the year 1917 the work of this department will eclipse anything done in the past along similar lines. The December work surpasses anything done previously this year.

Correspondence

THE FALLACY OF MIASMATIC FEVERS

November 30th, 1916.

Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

Dear Doctor: In a recent communication to a Northern paper I said in conclusion that if Florida was not the greatest summer health resort in the U. S. I would like to be "shown."

One of the readers asked the following query:

"Why is it that some regions of the State are known as the most unhealthful and producers of miasmatic fevers?"

Being unacquainted with such sections, I shall appreciate your reply to the question.

Yours very truly,

Jacksonville, Fla., Dec. 4, 1916.

Dear Sir: I have your letter of the 30th, and thank you for writing, in order to get definite information as to health conditions.

I note that particular part of your correspondent's letter with reference to "miasmatic fevers," and wish to call your attention to the fact that there are no such fevers. Malaria, which was formerly believed to be caused by miasmas has been proven, years ago, to be transmitted only by the mosquito, and it is for that reason that it is more prevalent in swampy localities. But malaria, like typhoid and other of the communicable diseases, is entirely preventable. By screening to keep out the malaria mosquito, which bites only during the night time, or by sleeping under mosquito nets, to prevent the insect biting its human host during the night, will prevent an infection from the disease. Also, if houses are screened to prevent the ingress of flies, and if the necessary precautions are taken for the proper disposal of excreta, such as installing fly-proof sanitary privies, there is little danger of these fevers. In case there is a case of typhoid in a neighborhood, if the excreta from this patient is properly disposed of, and other precautions taken, by those who may be compelled to come in contact with the sick, there is little danger of spread. And there is always the safeguard of vaccination against typhoid, should it make its appearance in any community.

If I can be of any other service to you please do not hesitate to call upon me.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

DIPHTHERIA SPECIMENS FOR EXAMINATION

November 30, 1916.

State Board of Health, Jacksonville, Fla.

Gentlemen: Some of the children of this community have been associated with children with diphtheria and while there are no suspicious cases here, I would like to send you a number of specimens for examination. I realize that this would be working a hardship on you, but it seems that there are no funds available for this work to be done in the rural districts and if you will send me a supply of containers, I will send at least one or two specimens from each family sending to school.

I have done considerable microscopic work, but do not feel capable of passing on an important matter like this.

I am anxious to learn to identify the diphtheria bacillus and would like to have a letter from you on this subject. I have the literature, of course, but

would like to know what stain you use and the exact technique you follow in practical work.

Thanking you in advance, I remain,
Very respectfully,

Jacksonville, Fla., Dec. 2, 1916.

Dear Doctor: In response to your letter of the 30th, I am sending you today, under separate cover, fifty swabs, which may be used for the collection of specimens for examination for the diphtheria bacillus.

We shall be very glad indeed to make these examinations for you in our laboratory and I would not advise you to attempt this work in your own office as it would probably be rather expensive and inconvenient for you to provide yourself with the necessary incubator and culture media to grow these cultures for examination.

The method followed in our laboratory in the preparation of such specimens is as follows:

When the swab is received the culture is planted upon the blood serum media and incubated at 37 degrees Centigrade for from twelve to eighteen hours, after which a smear is made from this culture, stained with Kinyoun's stain, and examined under the oil immersion objective.

If you wish further details of the technique employed in our laboratory, and will advise me of the fact, I will refer your letter to Dr. E. G. Birge, Bacteriologist, who will be able to discuss with you further details of the procedure.

Yours very truly,
(Signed) Joseph Y. Porter, State Health Officer.

FREE VACCINE AND ANTITOXIN

Jacksonville, Fla., Dec. 3, 1916.

Dear Doctor: Replying to the last paragraph of your letter which was turned over to the Engineering Department for answer with reference to the water container, I wish to advise you that the State Board of Health has distributing stations all over the state handling antitoxins and vaccines under the label of the State Board of Health, which are furnished free to the indigent upon certificate by the attending physician, and this plan has been in operation over a year. Every physician in the state has been written to twice on the subject, and in addition an article appeared in the Health Notes outlining the plan, as well as a press service which goes to every newspaper in Florida.

The distributors for Holmes County are the Dalton Drug Company, at Bonifay, and they will furnish this vaccine to the indigent upon properly signed certificates from the attending physicians, or to those who are able to pay for it, at State Board of Health prices, which are much lower than the regular market price. In cases of emergency, the Bettes Pharmacy at Jacksonville acts as distributing agent for the entire state, and should the supply of the local distributors be exhausted, or if for any other reason it is impossible to obtain the products from the district agency, a telegram to the Bettes Pharmacy will receive prompt attention.

Very truly yours,
(Signed) Joseph Y. Porter, State Health Officer.

Press Comment

MANY PATIENTS AT FREE CLINIC

Since the inauguration of the Hillsborough County Anti-Tuberculosis Society with a free clinic in the Penn Trust Company building, people of Tampa who are afflicted with tuberculosis can find help without cost, and, with a conscientious following of the rules laid down by the physician in charge, stand an excellent chance of being cured.

More than twenty-five patients are already on the list taking advantage of the work of the clinic; and a visiting nurse, Mrs. Blount, is doing the outside work, going into the homes and teaching the mothers how to protect themselves and their families from consumption.

The cases which have come to the clinic during its first few weeks of existence comprise practically every stage of the disease. Many are cases which have been afflicted but a short time, and these will be cured very easily. One of the important steps in the war on tuberculosis is to discover the disease as early as possible, and the sooner it is recognized, the quicker is the cure. In the treatment of tuberculosis, very little medicine is used, but those who need it and are unable to pay, are furnished with the necessities at the clinic, by the physician in charge.

A monthly report will be inaugurated at the end of September, showing exactly what progress has been made in the work, and the same system will be used as is used by the National Tuberculosis Association. The number of cases handled, and the advancement made in each case will be included in the list, and the first monthly summary will be a valuable basis on which to continue the work.—Tampa Times.

GAINESVILLE HEALTH DEPARTMENT ALERT

Another evidence that the City Board of Health is ever alert in guarding the health of the people, was given yesterday in Municipal Court, when a fruit dealer was fined \$2.00 and costs for violating the requirements to screen all fruits against flies. It was stated that the only fruit exposed was some pears only sold for cooking purposes, but the court assessed the fine.—Gainesville Sun.

HEALTHIEST CITY IN WORLD

A prominent inspector of health has shown from statistics that London is one of the healthiest, if not the healthiest, city in the world. He attributes the low death rate—still on the decline—to the perfect sanitary system of the city and its suburbs, its many open spaces, the teaching of hygiene in the schools of the country, council and its effect upon the parents, the progress of suburban life, outdoor sports, and the magnificent street car systems which get the workers away each day from unhealthy environments.

He pleads for a more vigorous enforcement of the factory and building acts and the voluntary abandonment of week-end parties. "City life requires a real tonic, which is not provided by card parties in boat houses and seaside trips." Rest, he thinks, is more recuperative to the nerve tissues of the busy man of the world as well as the working man.—Apopka News.

HELPING THE TUBERCULOSIS VICTIMS

It is pleasing to note the fine work being done by the clinic of the Hillsborough County Anti-Tuberculosis Society, recently established at Florida Avenue and Polk Street in behalf of moneyless victims of the white

plague, many of whom will be restored to health if they obey instructions. The clinic is at present in charge of Dr. J. D. McRae, who is giving attention to about twenty-five patients.

Principal among the requisites for the cure of tuberculosis is nutritious food, including milk and eggs, with which some of the victims now being treated cannot provide themselves. Officers of the society are planning, in some way, to raise funds for the purchase of proper food for the poorer victims, and whatever the plan adopted may be, The Times hopes it will be liberally supported by the public.—Tampa Times.

HEALTH OFFICE CALLS ATTENTION TO DISPOSITION OF GARBAGE

(Gainesville Sun)

Editor Sun—Many nuisances are created daily and allowed to exist until corrected by the city trash wagon. Now these particular kind of nuisances breed and attract flies and give off odors like unto that of a dirty barn yard or cow lot. Some may say that since it is cold weather flies do not breed. This is partly true, but we must remember that in this part of the country we sometimes have a week and even longer of summer weather and during this time flies thaw out, lay their eggs, hatch out and go for the food and sick rooms. We are taught that we should prepare for war in time of peace and most of us believe in preparedness and we can begin right here by complying with rule No. 4, of the City Board of Health, by obtaining metallic garbage pails with tight-fitting lids, and by using them we prevent MR. FLY from finding a breeding place during warm weeks and summer time. Buy a can suitable to the size of your family or number of your boarders and the city trash wagons will keep them emptied for you, and you must not forget to place the can where the trash man can get at it with little effort. Remember also to place WET garbage as defined in Rule No. 4, in the garbage cans and place your DRY trash or rubbish in separate containers, barrels, boxes, etc., but weight the papers down so that they will not blow over on your neighbor's premises.

We have not rigidly enforced this rule heretofore because we have been too busy, but, this is for your information and guidance.

Yours very truly,

City Health Officer.

Veterinary Notes

THE STOMACH ROUND WORM IN SHEEP

Of all the domesticated animals, the sheep is the most afflicted with internal parasites.

Although there are comparatively few sheep in Florida, we are frequently in receipt of letters from sheep owners complaining of various ailments. There have been few opportunities presented for making the proper kind of investigation of these troubles; hence, we may say little is known of the diseases affecting Florida sheep. Recently, however, a sheep was received from Alachua County, with a statement that many had been lost from the disease affecting this one.

The animal was received in a dying condition. A post-mortem examination was promptly held. There was great emaciation and pronounced anaemia. When cut into little or no blood escaped. All the organs, beyond their almost bloodless condition, were normal in appearance, except the fourth or last stomach. Here, there was evidence of inflammation and hundreds of small reddish worms, about an inch long and hair-like in size. Their great number was plainly evident when the contents of the stomach were emptied into a bowl containing water. Worms in such numbers could easily produce death from gastritis or possibly from absorption of the poisons excreted by them.

This worm *Strongylus contortus*, or the twisted strongyle, is an inhabitant of the fourth stomach of sheep and goats. Though in the majority of flocks it produces but little disturbance, its presence in such numbers as was the case in this sheep leaves little doubt that deaths in this flock were caused by it.

Cooper Curtice, in "Animal Parasites of Sheep," has the following to say about this worm and how to cure the animals infested with it:

"Occurrence—This worm may be found in all stages in the fourth stomach or abomasum of sheep. When collected immediately after death from a slaughtered sheep they may be detected adhering by their heads to the mucous membrane. They are then of a reddish color, which may be because they feed in part upon the blood of the victim.

"The life history of *Strongylus contortus* seems to be apparently simple. Among a number of lambs kept at the Experimental Station in 1888 were two or three which had been raised there. A post-mortem examination of one of these, with four other lambs which had been at the Station for the five previous months, revealed numbers of *Strongylus contortus* in all stages of growth. These lambs were supplied with well water, and were allowed to run in a small, dry, grassy yard connected with a stable. The presence of this species of all sizes in the former group of lambs showed that they acquire them on the place, and that their development was direct; that is, they did not pass through a secondary host in passing between the sheep and the lambs, for all of the conditions were under inspection. The grass in the yard became very short, and probably it was because the sheep ate it so close to the ground that they became more infested with worms than sheep ordinarily do. The history, therefore, is probably as follows: The eggs fall to the ground; they are eaten by other sheep along with their feed, and they then arrive at the stomach and develop there.

"The disease they cause can not easily be distinguished from that produced by other intestinal parasites. In the worst cases, besides a general lack of tone and good health, there is weakness, paleness, some fever, diarrhea, etc. In fatal cases death is said to occur within a very few days after the illness is observed; but, as the parasites develop slowly, it is probable that no symptoms of illness are apparent until after the lambs have been ailing for some time. A positive diagnosis is to be made only by a post-mortem examination. The little worms, if present in large numbers, will appear like masses of threads lying in the stomach. If the sheep has

been killed for examination, the worms will be seen wriggling and squirming in all directions.

"Treatment—Various remedies are proposed, but of those available an emulsion of milk and turpentine, prepared by shaking the mass well, seems most practicable. Add 1 part of spirits of turpentine to 16 parts of milk, and give from 2 to 4 ounces of it to each animal, according to age of patient. One dose should be sufficient; if not, repeat it in three or four days. Or, take of linseed oil, one ounce; turpentine, one-half ounce, shake well and give as one dose. Quantities sufficient for any number of sheep may be made up in these proportions.

"The following recipe is from Finlay Dun's 'Veterinary Medicine': Common salt, 3 pounds; powdered ginger and niter, half a pound each; dissolved in 3 gallons of warm water; add 24 ounces of turpentine when nearly cold. The dose for lambs between four and six months' old is 2 ounces. The entire quantity is sufficient for one hundred and sixty lambs. For delicate lambs, which are coughing and purging, the same writer recommends oil of turpentine, powdered gentian, and laudanum, 2 ounces each, all to be dissolved and stirred in 1 quart of linseed tea or lime water. This quantity is sufficient for ten or twelve doses.

Good, nourishing food, and a dry yard in summer, or a healthy, well-ventilated stable in fall and winter are advisable. In giving medicine, drench from a horn, a spoon, or a stout glass bottle. Bottles are always liable to break. Let an assistant throw the sheep onto its haunches and hold it between his legs back toward him. With the lower jaw seized in his left hand, from the left side, he can either seize the upper jaw or pull out the cheek-pouch with his right. The medicines are best administered while the sheep are thirsty. Small doses may be diluted, but a dose of 4 or 6 ounces is more apt to run directly into the fourth stomach than larger doses. Otherwise, some of the latter might be diverted into the second stomach and fail of an immediate effect."

The following recipe was recommended to the readers of "Field and Farm," August 7, 1889, as a preventive remedy for worms in sheep. Mr. G. B. Bothwell, of Breckenridge, Mo., who used it for fifteen years with success, is its author:

Salt, 1 bushel; air-slacked lime, 1 peck; sulphur, 1 gallon; pulverized rosin, 2 quarts; put in trough with cover, where sheep can have free access. When sheep become thoroughly infested with worms death is almost sure to follow, but the above, if kept before the sheep, will surely act as a preventive."

Summary of Public Health Administration, November

WEST COAST DISTRICT

Tampa: Routine work, office of Assistant to the State Health Officer. Correspondence.

Hillsborough County: Called for differential diagnosis in suspected cerebro-spinal meningitis within city of Tampa. Called for differential diagnosis in another suspected case cerebro-spinal meningitis; investigation of history of cases made, spinal fluid examined which proved cases not to be cerebro-spinal meningitis.

Port Tampa City: Interview with attending physician concerning case smallpox; case isolated and precautions taken.

Lake Thonotosassa: Trip at request of attending physician for differential diagnosis case suspected poliomyelitis.

Trilby: Investigation case suspected poliomyelitis in country.

SOUTH EAST COAST DISTRICT

Key West: Routine work, office of Assistant to the State Health Officer. Case of leprosy diagnosed and isolated. Assistance given Dr. Nigert of the U. S. Bureau of Animal Industry in campaign for eradication of cattle tick; assured support of dairymen, city council, county commissioners and general public. All complaints investigated and nuisances ordered abated. Routine laboratory work.

WESTERN DISTRICT

Pensacola: Routine work, office of Assistant to the State Health Officer. Management of communicable diseases, and supervision of inspections by sanitary partolman as follows: Screening Law—Restaurants 3, lunch counters 5, meat shops 1, butcher shops 1, grocery stores 5, fruit stands 7. Surface Closet and Water Carriage Laws—private residences 4. Abatement ordered where violations were found. Communicable Diseases—typhoid fever 4, tuberculosis 3, scarlet fever 2, diphtheria 4. Fumigations, releases, etc., 5.

SOUTH CENTRAL DISTRICT

Plant City: Routine work, office of Assistant to the State Health Officer. Visit cases malaria, pellagra and diphtheria with attending physicians. Sanitary inspections. Checking of death reports for 1915 and 1916, elimination as far as possible of indefinite terms and diagnoses and substitution therefor of more dependable data as far as possible, with aid of attending physicians, undertaker and citizens; information turned in to local registrar and reports corrected.

Tampa: With City Health Officer submission of specimens of milk for analysis. Consultation with Pure Food Commissioner, Bacteriologist and Assistant to the State Health Officer West Coast District.

Mulberry: Visit cases of dysentery with attending physicians. Conference with local medical man and member of city council on local sanitation. Sanitary inspection of town.

Winter Haven: Conference with local physician on typhoid; sanitary inspection.

Eagle Lake: Investigation of alleged epidemic of typhoid; sanitary survey of town; conference with local citizens regarding situation.

Youmans: With City Health Officer conducted an examination of dairy; routine inspection; suggestions for betterment of sanitary conditions.

Bartow: Conference with city health officer; sanitary inspection of town; collection of data on the enforcement of state laws.

Coronet: Visit cases of malaria with attending physicians; inspection of premises and discussion of preventive measures.

Lakeland: Consultations with city health officer. Discussion of measures for improvement of milk supply. Betterment of sanitation of drug stores and barber shops. Routine inspections.

CENTRAL DISTRICT

Ocala: Routine work, office of Assistant to the State Health Officer.

Micanopy: Consultation with citizens and doctors in regard to enforcement of screening law.

Williston: Investigation of source of infection of cases diphtheria.

NORTH CENTRAL DISTRICT

Live Oak: Routine work, office of Assistant to the State Health Officer.

Bacteriological examination for local physicians.

Branford: Investigation of reported infantile paralysis.

Lake City: Investigation reported infantile paralysis.

Ellaville, Lee, Madison, Greenville, Monticello: Monthly inspection on way to Monticello to investigate outbreak of diphtheria among school children.

NORTH EAST COAST DISTRICT

St. Augustine: Routine work, office of Assistant to the State Health Officer. Lectures to nurses of two hospitals. Preparation of articles on Public Health for newspapers.

WEST CENTRAL DISTRICT

Tallahassee: Routine work, office of Assistant to the State Health Officer. Notices served on fruit dealers in regard to screening. Conference with mayor and chief of police in regard to screening ordinances.

EDUCATIONAL HEALTH EXHIBIT TRAIN

Towns visited during November: Pensacola, Molino, McDavid, Century, Milton. Total number of towns visited in 1916 to December 1.....126

PUBLICITY AND PUBLICATIONS

Monthly bulletin "Health Notes," Vol. XI, No. 11, November, 1916, pp. 32. Press Service Bulletins to Florida newspapers: Nov. 1, "Safety First;" Nov. 8, "Education in Sanitation;" Nov. 15, "Health and Appearances;" Nov. 22, "Care of Crippled Children;" Nov. 29, "Clothes and Underclothes." Publications out in November: Publication 169, "Sterilization of Water," by Geo. W. Simons, Jr., Chief Bureau of Engineering, Reprint from Vol. XI, No. 10, October, 1916, Health Notes, pp. 5.

DISTRIBUTION OF LITERATURE DURING SEPTEMBER

Mailed upon request and distributed in field.....	10,434
Press service bulletins to Florida newspapers, 5 issues.....	1,375
Health Notes, November, mailing list.....	10,500
Total number pieces distributed.....	22,309
Number pieces literature distributed Jan. 1 to Dec. 1, 1916.....	188,789

SMALLPOX

Reported cases of smallpox in Florida, November, 1916:

Port Tampa, Hillsborough County..... 1
 Total number cases reported in 1916 to December 1.....88

DISTRICT TUBERCULOSIS INSPECTION

Monthly Report, Status of Tuberculosis District Nursing, Month Ended November 30, 1916

<i>Residence of Cases Visited to Date by Districts</i>	<i>Total Number of Cases Under Instruction Last Report</i>	<i>New Cases Found Month Ended</i>	<i>Cases Found to Have Died</i>	<i>Cases Removed</i>	<i>Cases Apparently Cured</i>	<i>Total Number of Cases in District Under instruction to Date</i>	<i>Total Number of Cases Following Instruction</i>
District No. 1.....	78	1	9	5	3	62	48
District No. 2.....	48	..	..	..	..	48	25
District No. 3.....	153	3	..	..	1	155	97
District No. 4.....	75	..	..	..	..	75	64
District No. 5.....	152	1	2	..	..	151	96
District No. 6.....	209	8	1	..	..	214	163
District No. 7.....	64	22	12	3	3	66	66
District No. 8.....	120	7	4	5	2	118	67
District No. 9.....	151	13	7	..	2	155	155
District No. 10.....	137	..	..	..	..	137	84
District No. 11.....	103	1	..	..	..	104	72
District No. 12.....	140	31	9	..	..	162	162
State at Large (Colored Cases visited by Colored Nurse)	115	30	2	..	..	143	109
Total for State....	1,545	117	46	15	11	1,590	1,208

BIOLOGICAL PRODUCTS

Distribution of Biological Products during October (anti-rabic vaccine, anti-typhoid vaccine, diphtheria and tetanus antitoxin free to indigent only.) Number of persons receiving treatment:

<i>County and Town</i>	<i>Anti-Smallpox Vaccine</i>	<i>Anti-Rabic Vaccine</i>	<i>Anti-Typhoid Vaccine</i>	<i>Diphtheria Antitoxin Curative and Immunizing</i>	<i>Tetanus Antitoxin Immunizing</i>
COLUMBIA					
Lake City.....	..	..	..	1	..
DUVAL					
East Port .....	..	1	..	..	..
Jacksonville .....	..	4	30	8	2
South Jacksonville	30	..	..	..	..
ESCAMBIA					
Pensacola .....	..	..	..	6	..
FRANKLIN					
Apalachicola .....	..	..	180	..	..
HILLSBOROUGH					
Plant City .....	..	..	..	2	..
Tampa	150	..	..	..	..
MARION					
Ocala	10	..	..	..	..
MONROE					
Key West	30	..	..	..	5
POLK					
Winter Haven .....	..	..	10	..	..
ST. JOHNS					
St. Augustine.....	170	..	..	..	..
ST. LUCIE					
Okeechobee	10	..	..	..	..
Sebastian	20	..	..	..	..
SUWANNEE					
Live Oak .....	..	..	6	..	..
Total.....	420	5	226	17	7
Total number persons receiving anti-smallpox vaccine in 1916 to December 1.....					
					5,507
Total number persons receiving Pasteur treatment in 1916 to December 1.....					
					51
Total number persons receiving Anti-typhoid vaccine in 1916 to December 1.....					
					1,044
Total number persons receiving Diphtheria antitoxin in 1916 to December 1.....					
					246
Total number persons receiving Tetanus antitoxin in 1916 to December 1.....					
					25

CRIPPLED CHILDREN

NAMES									Operating, Plaster Work, Special Treatment, Etc.	Date Discharged and Condition	Diagnosis	Under Treatment
	In St. Luke's, 11-1-16	In Brewster (Col.), 11-1-16	Outside Treatment, 11-1-16	Applications Received	Admitted St. Lukes	Admitted Brewster	Admitted for Office Treatment	Examined, not Admitted				
Total Cases During Month												
I. P.	1	..	..	..	..	..	..	1	Cast app. and daily dressings.....	Chronic osteo- myelitis	1
F. P.	1	..	..	..	..	..	..	1	X-Ray ex., dressings and vaccine therapy	Tb. Hip.....	1
H. M.	1	..	..	..	..	..	..	1	Daily dressings.....	Tb. Hip and sacrum	1
O. D.	1	..	..	11-27	..	..	..	1	Tuberculin test and daily dressings..	Tb. Spine (?)..	1
G. G.	1	..	..	..	..	..	..	1	Corrective cast.....	Club Foot.....	1
R. W.	1	..	..	..	..	..	..	1	Massage and exercises.....	Spastic Para- plegia	1
A. T.	1	..	..	..	..	..	..	1	Curetting necrosis tibia.....	Osteomyelitis tibia.	1
C. B.	1	..	..	11-10	1	..	..	11-17	Tenoplasty, flexor tendons lt. fore- arm for contracture.....	Traumatic Myositis flex- ors of forearm	1
Total	8	..	..	1	2	..	..	1	8		8

BACTERIOLOGICAL LABORATORIES SPECIMEN EXAMINATION

	Jacksonville	Tampa	Pensacola	Key West	Miami	Tallahassee	Total
Animal Parasites.....	223	74	26	1	17	12	353
Diphtheria.....	1,079	99	121	..	39	438	1,776
Gonorrhoea.....	86	46	55	2	13	6	208
Malaria.....	144	98	30	1	30	40	343
Pathological Spec.....	7	3	..	..	8	..	11
Rabies.....	..	..	2	..	..	..	9
Tuberculosis.....	145	50	30	2	16	9	252
Typhoid.....	115	99	37	..	19	17	287
Water: Bacterial Ex.....	27	4	..	..	16	..	47
Wassermann Tests.....	296	96	..	..	..	..	392
Miscellaneous.....	22	41	21	7	62	20	173
	2,144	610	322	13	220	542	3,851

Total number of specimens examined in the Laboratories of the State Board of Health of Florida, during November, 1916.....3,851

DISTRIBUTION DISEASES DETERMINED BY BACTERIOLOGICAL LABORATORIES NOVEMBER, 1916

(MALARIA)

TOWN	Diphtheria	Gonorrhoea	Esitocoulummal	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Trichinaria	Oxyuris	Rabies	Wassermann	Leprosy
Apalachicola.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Apopka.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arcadia.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Bartow.....	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Bluff Springs.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Brooker.....	..	..	..	..	..	..	..	6	..	..	..	..	..	..	..
Brooksville.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Bunnell.....	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Bushnell.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Campbellton.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Cedar Key.....	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..
Century.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Chattahoochee.....	..	..	..	..	..	..	..	..	..	..	..	..	..	13	..
Chiefland.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Citra.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Clearwater.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Cocoa.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Crescent City.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Daytona.....	1	..	..	..	..	..	1	2	..	..	..	..	..	..	..
Delray.....	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
" Release Cult.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunnellon.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Eustis.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Fellsmere.....	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..
Fernandina.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Ft. Meade.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Ft. Myers.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Ft. Pierce.....	1	1	1	..	..	1	..	2	..	..	..	..	..	..	..
Frostproof.....	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Gainesville.....	2	1	..	..	..	..	..	1	..	..	..	..	..	..	..
Graceville.....	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Grandin.....	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Hallandale.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Havana.....	..	..	..	..	..	..	1	..	3	..	..	..	..	..	..
Interlachen.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" Release Cult.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jacksonville.....	13	18	1	..	2	1	5	16	24	1	1	1	2	78	..
" Release Cult.....	74	..	..	..	..	..	..	..	..	..	..	..	..	..	..
So. Jacksonville.....	15	..	..	..	..	..	..	3	..	..	..	..	..	..	..
" Release Cult.....	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jasper.....	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..
Jay.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Kendall.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Key West.....	..	1	..	..	..	..	..	2	..	..	..	..	..	1	1
Kissimmee.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Labelle.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Lake City.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..

—MALARIA—

TOWN	Diphtheria	Gonorrhea	Etiocooutummal	Quartan	Tertian	Species not Determined	Typhoid	Tuberculosis	Uncinaria	Ascaris	Trichinuris	Oxyuris	Robies	Wassermann	Leprosy
Lakeland	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Largo	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Laurel Hill	..	..	..	..	..	1	..	..	2	..	..	..	..	..	..
Leesburg	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Lemon City	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Live Oak	..	1	..	..	..	1	2	..	..	..	..	..	..	..	..
Longwood	..	..	..	..	..	..	..	13	1	..	..	..	..	..	..
Madison	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Mayo	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Melbourne	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Miami	..	2	..	..	..	..	1	3	..	..	..	..	..	1	..
Micanopy	..	1	..	..	..	..	..	2	..	..	..	..	..	..	..
Milton	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Monticello	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..
New Smyrna	1	..	..	..	..	..	..	3	..	..	..	..	..	..	..
Nichols	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Nocatee	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Ocala	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Okeechobee	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Orlando	..	4	..	..	..	..	..	1	4	1	..	..	..	..	..
Oxford	..	..	..	..	..	..	..	6	6	1	..	..	..	..	..
Pensacola	26	21	1	..	2	1	2	7	6	..	..	..	..	3	..
Pine Barren	1	..	..	..	..	..	..	4	..	..	..	..	..	..	..
Plant City	2	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Port St. Joe	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Quincy	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..
Raleigh	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
River Junction	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
St. Augustine	..	..	..	..	..	..	..	4	..	1	..	..	..	..	..
Sneads	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Starke	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Tallahassee	8	2	..	..	3	..	1	3	..	..	..	..	..	..	..
Tampa	6	8	..	..	2	7	6	5	..	3	..	..	17	..	..
West Tampa	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Tarpon Springs	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..
Titusville	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
Williston	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
Zephyrhills	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..
Zolfo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	225	63	3	..	5	19	28	66	118	3	7	1	3	115	1

BUREAU OF VETERINARY SCIENCE
TICK ERADICATION

Cattle dipping vats reported constructed during November, 1916:

None

Total number of vats reported constructed to December 1.....122

GLANDERS

Diagnosed by Veterinarian during November, 1916:

Mandeville, Duval County.....1 mule, \$75.00

IMPORTATION OF CERTIFIED LIVE STOCK

Horses, 170; mules, 722; cattle, 206; hogs, 58; dogs, 2.....1,158

EXPORTATION OF CERTIFIED LIVE STOCK

Horses, 24; mules, 3; cattle, 1,583; hogs, 1; goats, 2.....1,613

VETERINARY INSPECTIONS FOR THE MONTH OF NOVEMBER

November 1, near Jacksonville, vaccination of hogs; November 7-8, Jacksonville, tested 14 mules for shipment; November 3, Jacksonville, tested one mule for shipment; several herds of hogs vaccinated in Leon County during the month; November 10, Jacksonville, consultation with Executive Office; November 12, Mannville, investigation for glanders; November 13, Bryceville, investigation for glanders, (positive); November 18, Jacksonville, consultation with Executive Office.

HOW TO TAKE A SAMPLE OF WATER



(1)

This photograph shows a sterile bottle furnished by State Board of Health, as it appears after removing the copper cover from the container

NOTE BOTTLE AND DATA BLANK



(2)

After removing bottle from container (1) fill out data blank. Every question is important and **MUST** be answered in order to give laboratory necessary information

IMPORTANT



(4)

Tap should be burned with blow-torch or alcohol-soaked cotton. Allow water to run for five minutes. Hold stopper by finger tips and bottle at bottom. After filling, replace stopper carefully.

VERY IMPORTANT



(3)

Remove stopper by finger tips, hold by edge. Do not remove tin foil. Loosen stopper with slight turn

NOTE STOPPER AND METHOD OF HOLDING BOTTLE

**IT IS BEST TO TAKE A SAMPLE AS LATE AS POSSIBLE BEFORE SHIPPING IN ORDER TO MINIMIZE TIME ON ROAD
ICE SHIPPING CASE THOROUGHLY BEFORE SHIPMENT**

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